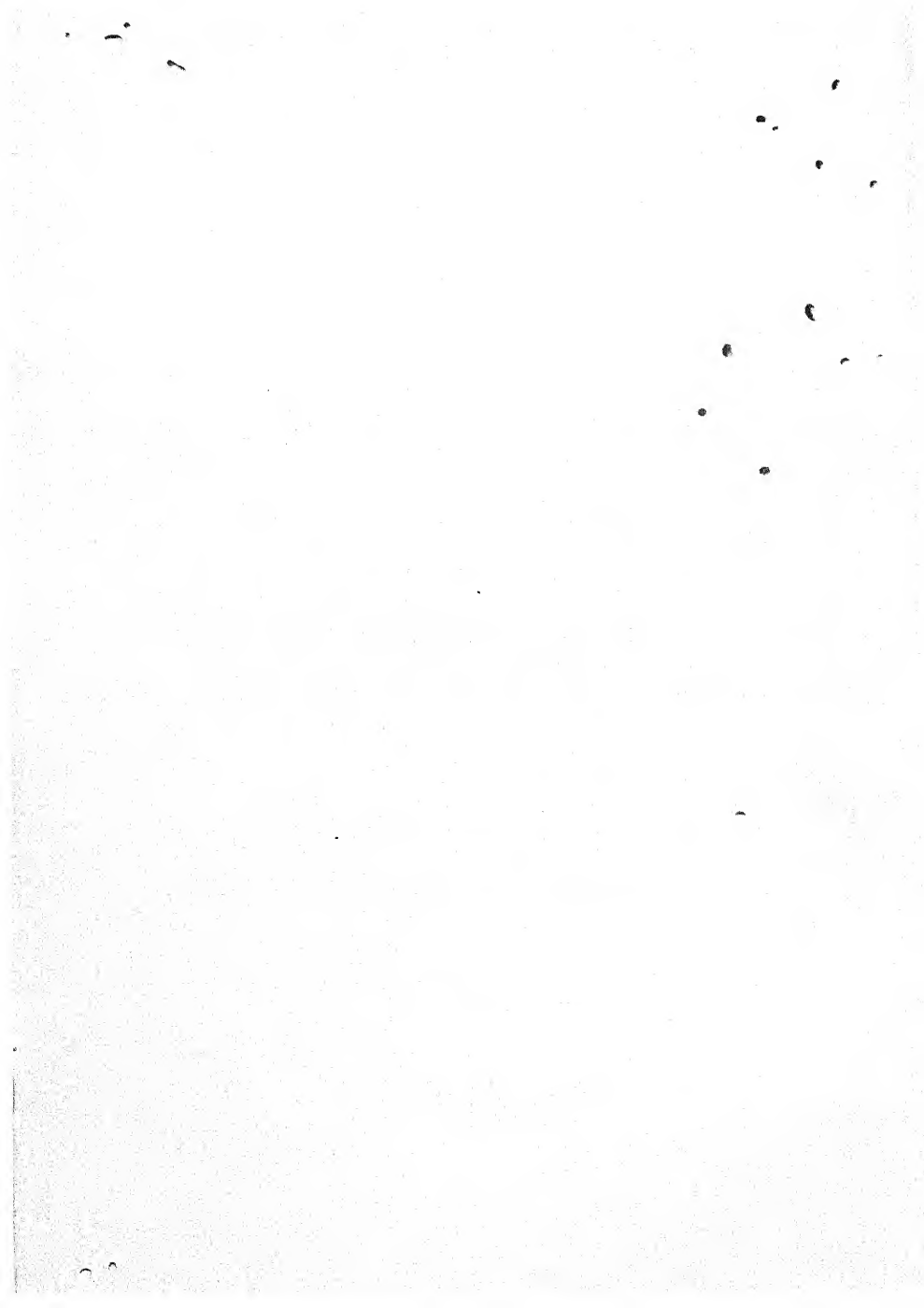


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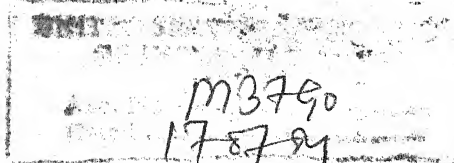


THE ELEMENTS OF IMPERIAL DEFENCE

A STUDY OF THE GEOGRAPHICAL FEATURES,
MATERIAL RESOURCES, COMMUNICATIONS,
and ORGANIZATION OF THE BRITISH EMPIRE

BY

A. G. BOYCOTT, B.A.



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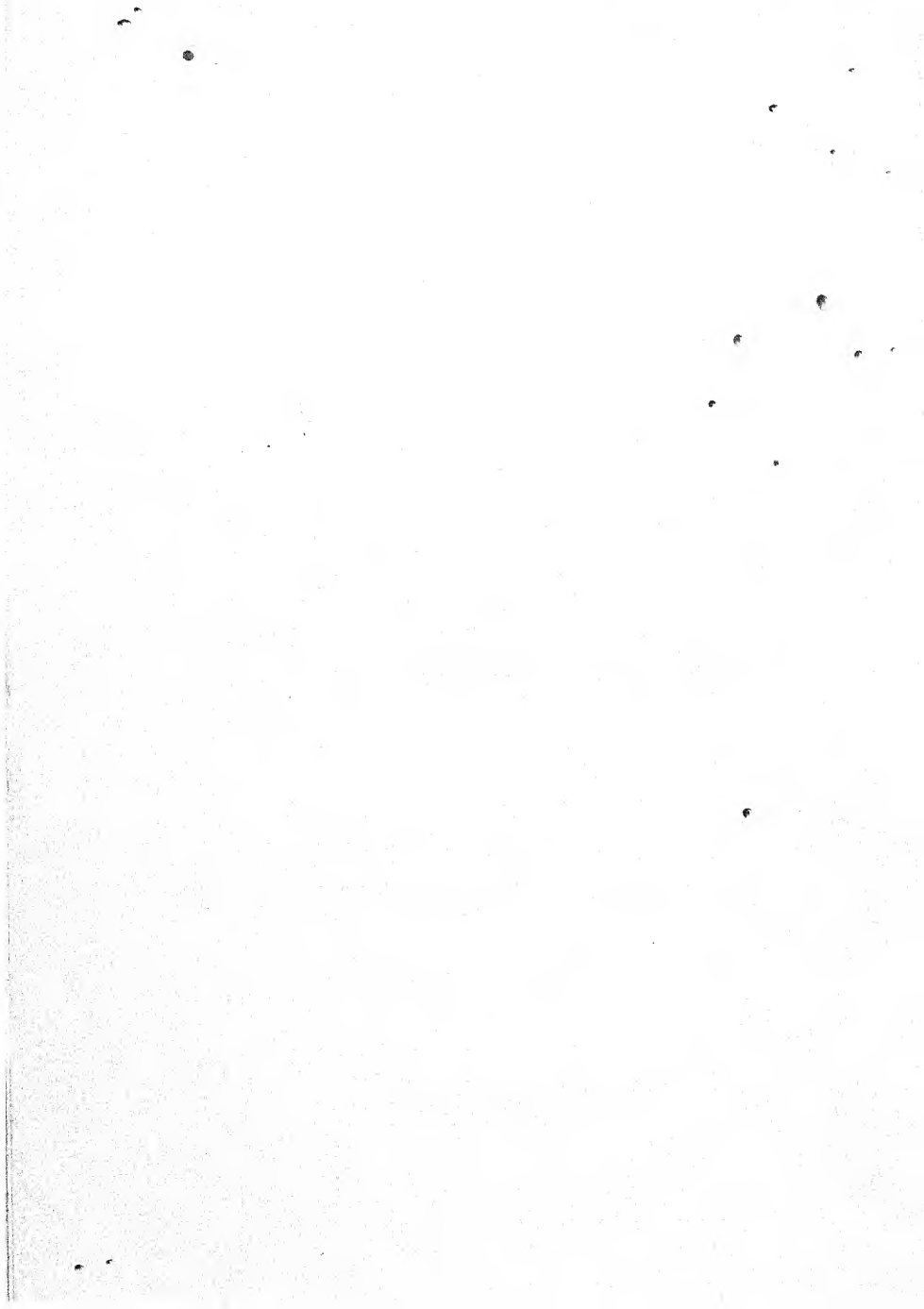
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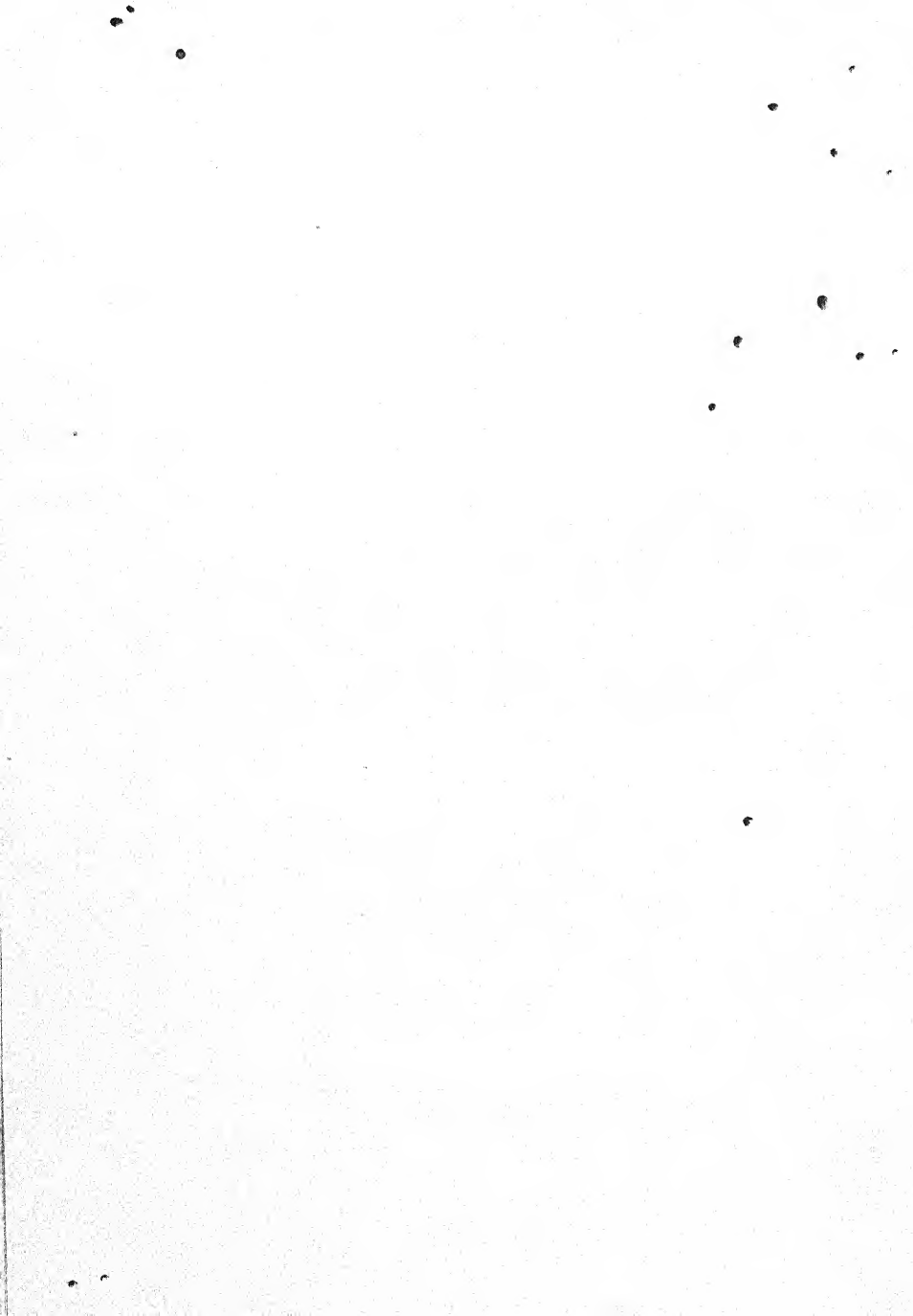
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"In the great frame of Kingdoms and Commonwealths it is in the power of Princes or estates to add amplitude or greatness to their Kingdoms. For by introducing such Ordinances, Constitutions and Customs as we have now touched they may show greatness to their Posterity and Succession. But these things are commonly not observed but left to take their chance."

BACON : *Of the greatness of Kingdoms and Estates.*

"If unity is a vital principle of Empire, an adequate defence force is the physical body through which this principle manifests itself. Without this force, unity is a mere disembodied spirit."*

RT. HON. W. M. HUGHES, *Prime Minister of Australia.*

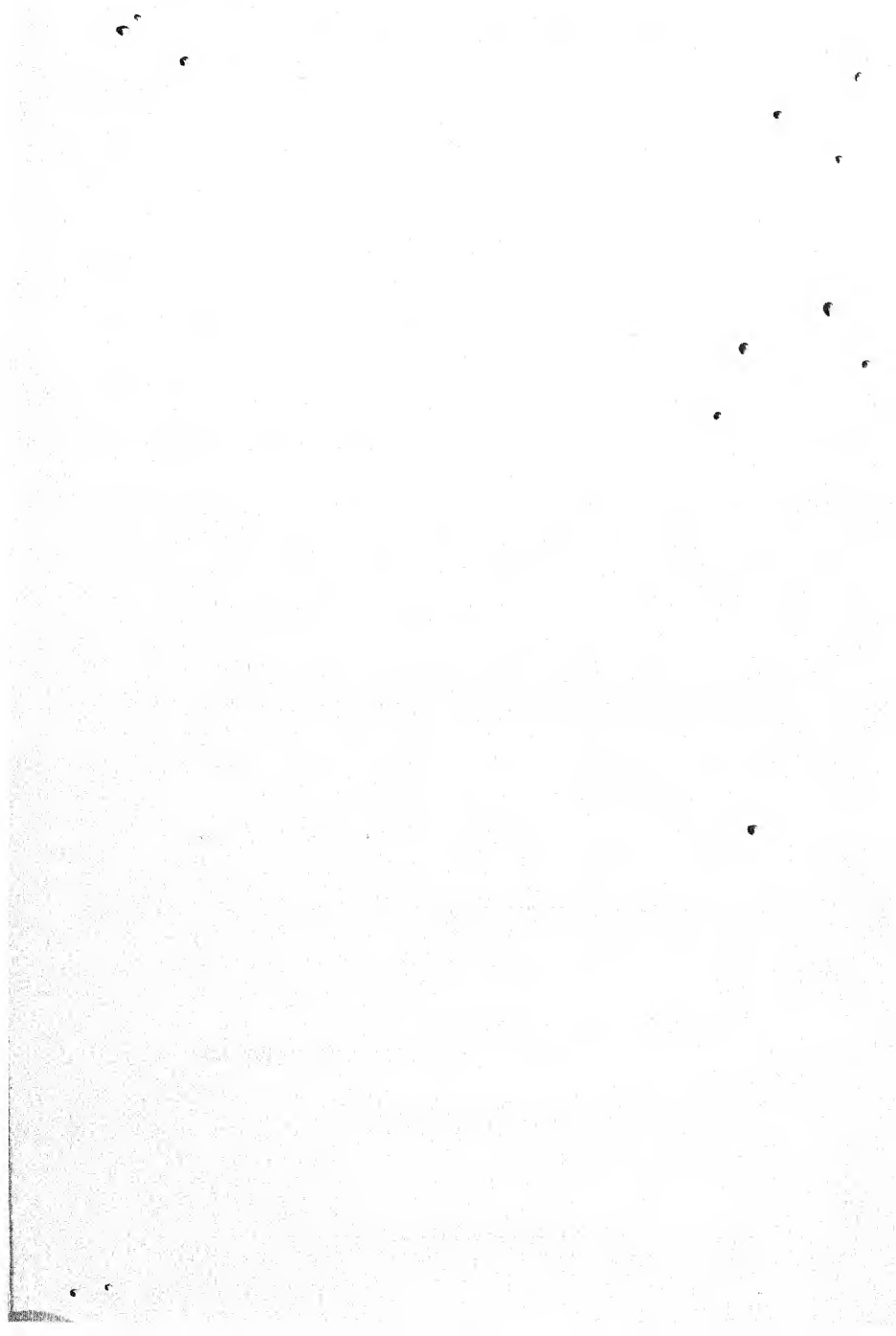
"The very foundation of Imperial Defence policy must be, first, unity of organization among and control over the forces of the Empire, and then the assurance of free inter-communication between its various portions, for without this mutual co-operation and support are impossible."

SIR W. D. BIRD : *The Direction of War.*

"It is necessary to realize that modern war is no longer a matter solely of navies and armies of professional soldiers and sailors, but one in which all the resources of a nation may have to become engaged."

RT. HON. STANLEY BALDWIN,
Prime Minister of Great Britain.

* Hughes : "The Splendid Adventure." By permission of Messrs. Benn, Ltd.



FOREWORD

THE British Empire, in the words of the report of the Imperial Conference of 1926, "considered as a whole defies classification and bears no real resemblance to any other political organization that now exists or has ever yet been tried."

So different are the constitutions and so varying the characteristics of the widely scattered parts of the Empire that to secure agreement upon major issues of policy and to co-ordinate imperial efforts threaten to become questions of ever-increasing difficulty.

The problem of imperial security is, however, so vital in itself that little divergence of view can exist as to the need for adequate defensive arrangements. Of these, first in importance is the enunciation of general and accepted principles as guides to action and second the setting up of an organization based upon an ascertained knowledge of the material resources available.

From the very nature of the present political organization of the Commonwealth, by co-operation *only* can adequate provision be made of those essential material resources of which the proper utilization can also *only* be effected by an organization in which all combine to secure co-ordination of effort.

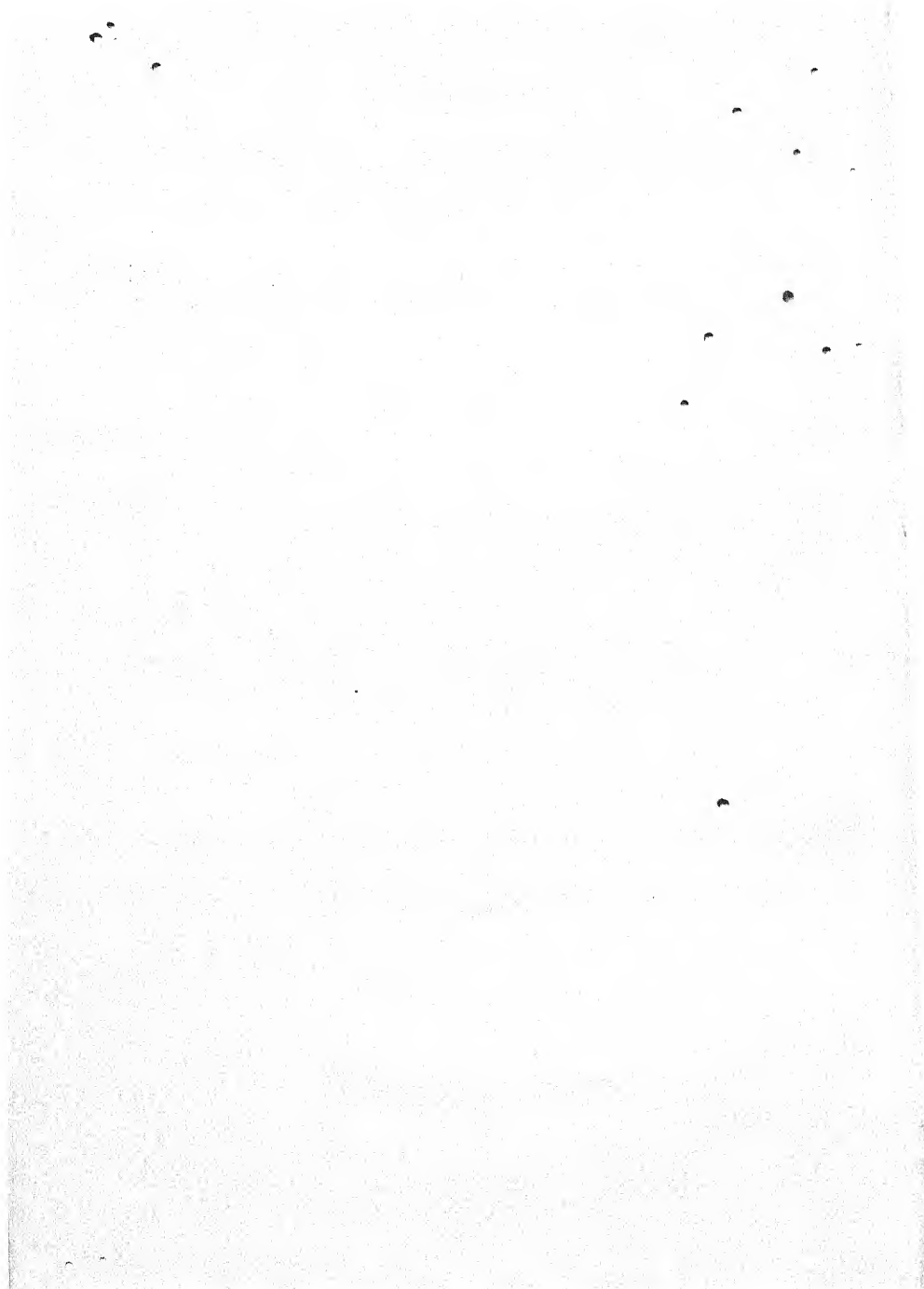
In this book an attempt has been made to classify the available material resources of the principal parts of the Empire ; to set out the means whereby imperial intercommunication is maintained ; to indicate the main lines of the organization whereby the maximum co-ordination of effort may be secured.

The bibliographies serve a dual purpose. Firstly, as a guide to those who wish to undertake further study of the particular subject matter of each chapter ; and, secondly, as some measure of acknowledgment of the debt of the writer to the various authors consulted, to many of whom, to their publishers and to the Controller of His Majesty's Stationery Office, the special thanks of the writer are due for permission to include direct quotations in his text.

The thanks of the writer are also due to those who have assisted in the typing of the manuscript and the preparation of the maps.

HADDENHAM,
BUCKINGHAMSHIRE.

June, 1931.



CHAPTER I

THE GROWTH OF THE BRITISH EMPIRE

LEAVING aside the invasions of various Northmen whose incursions may be regarded rather as migrations than as calculated efforts to subdue these islands, only twice—first at the hands of Rome and secondly at those of William of Normandy—has England been invaded and subdued by armed force.

The consequence of these two invasions was to reduce the greater part of these islands to a position of vassalage. While the Roman conquest passed without leaving enduring effects, those of the Norman are plainly discernible; English character gained from the intermixture of the races, and English institutions were improved by the more up-to-date Norman methods of government and administration.

England, however, lost her insular position, becoming again, as under Rome, part of continental Europe, and was consequently dragged into long-continued and frequently profitless interference in the dynastic disputes of feudal Europe.

The effect of the Hundred Years' War was to leave this country largely self-contained though not united, but still dependent upon Europe for her supply of those commodities which the warmer climates of southern Europe could produce or which came to us in transit through Europe from the Far East. The heavy strain of this long struggle tended to unite more closely ruler and ruled, and it was from the union of King and people that the often lawless baronry were finally subdued.

Under the Tudors, ruler and people willingly co-operated to resist both the claims of the Pope and the efforts of Spain. Though the defeat of the Armada definitely established England as a great country, she possessed no colonies if Newfoundland, annexed in 1583, be excepted.

In the defrayal of the rising cost of national administration and defence, a cost which the now outworn economic system of feudalism was unable to meet, the rulers of England were quick to realize the additional strength derived by Spain and Portugal from the new wealth of the Americas, and Elizabeth, debarred by the Papal award from any legitimate share therein, was always willing to turn a blind eye upon the piratical exploits of her captains provided that her treasury was thereby more amply filled with the sinews of war.

The sixteenth century, though adding but little to the overseas possessions of England, served, however, as a training period for the century of expansion which followed.

The nation was evolving a sound system of government and gaining wealth and strength. The value of sea supremacy was beginning to be appreciated, and a comprehensive knowledge of the world, its peoples and its potential sources of wealth were attained. The technique of seamanship was perfected.

Interesting as are the details of the early voyages of discovery, they need no recapitulation ; their results were, however, of the first importance.

The discovery of America and the new sea routes to the Far East radically altered the strategic and economic position of these islands. From being on the outer fringe of Europe and far removed from the Far Eastern trade routes, England found herself practically in the centre of the Old World and the New, and athwart the main sea routes between Europe and the Far East and the newly discovered Far West.

During the early years of the seventeenth century the romance both of piracy and discovery gave place to the business of colonizing and consolidation.

Men like Gilbert and Raleigh were impressed with the possibilities of these wide spaces as homes for colonists, and in 1607 and 1610 real, though ultimately unsuccessful, attempts were made to colonize Virginia and Newfoundland. In 1620 102 persons, seeking to find in the New World the opportunities for the exercise of their religion which were denied to them in the Old, left Plymouth and landed at Cape Cod. Despite immense hardships, these first settlers finally achieved success, the reports of which led many others to follow their example. By the end of the seventeenth century, English settlements stretched along the east coast of America, meeting the French colonists in the north of the continent and those of Spain in the south.

While the desire for religious freedom was leading some people to face the dangers of life in America, others were engaged in spreading English trade over the rest of the world. The rapid growth in the number of the various chartered companies of merchant adventurers, of which the East India Company, founded in 1600, was destined to be the most notable, was not only due to the desire of royal and other shareholders to receive their percentages of the profits of trade, but also because the possession of wealth was held to be the foundation of national security and defence, and consequently the first half of the century is marked by an unwillingness to interfere in the many conflicts of the continent and the efforts of the nation were concentrated upon laying the foundations of her maritime trade as the basis of the

national prosperity. These efforts soon served to bring England into conflict with the Dutch, whose East India Company, founded in 1602, had already developed a considerable trade in the East, particularly in Java, Ceylon and Malacca.

This success of the Dutch as a maritime power led to the passing of the Navigation Act in 1651, which aimed to secure the passage of English goods in English ships, thereby increasing the wealth of the country and the number of its seamen.

In pursuit of trading facilities with the West Indies, Barbados, the Bermudas and St. Kitts were seized to serve as trading stations and convenient "stepping-stones" on the trade routes. In 1655 Jamaica was taken from Spain.

By the end of the century two facts are clear. First, that English expansion is proceeding along two divergent lines: in the first place, large numbers of people are settling and making their homes in the lands of the New World; and in the second, in areas already populated and agriculturally developed, trading centres are being established.

The first type of settlement develops into the "Dominion," the second into the "Dependency." Both types are, however, dependent upon sea supremacy for their protection and for the full development of their potential wealth, and without this sea supremacy not only would the new Empire thus begun have passed in this instance to the Dutch, but England would have been deprived at a blow of the economic sources of wealth and the strategic bases that enabled her to withstand the attacks of the French during the eighteenth century.

As is well known, the passing of Holland ultimately left France and England alone to engage in a long conflict extending from 1689 to 1815. In the course of this struggle the claims of France to India and Canada were finally settled in favour of England.

It was in the reign of George III that the first Empire came to an end with the loss of the American colonies. This loss, so severe at the time, proved in the end a blessing in disguise since it showed the way to a new conception of colonization and liberated the energies of the nation for conquests in other and farther fields.

At the beginning of the nineteenth century, the industrial revolution not only gave an unparalleled stimulus to British trade, but improved out of all knowledge the facilities for travel and overseas settlement.

Other lands were acquired and other colonies developed, but the lessons learned from the loss of the American colonies led to a complete revision of the old mercantilist theories upon which the economic system of the Navigation Acts had been based and to the introduction of a new spirit underlying the ideas of colonization.

Edward Gibbon Wakefield was among the first to realize that the new colonies, so far from being an incubus, could and should be made a source of strength. He insisted that if only the right type of man were sent to the colonies and given a reasonable chance of "making good," these vast areas of undeveloped land in Canada, Australia, New Zealand and South Africa would provide a home for the millions whom the industrial revolution was producing in England; that they would, further, furnish the Mother Country with supplies of food and raw material and become a market for our own manufactured goods.

If Wakefield introduced a new and better spirit into colonization, it remained for Lord Durham to interpret for his country the other lesson to be learnt from the loss of the American Colonies.

Sent to Canada to inquire into the revolt of 1837, he proposed the complete amalgamation of Upper and Lower Canada and the establishment of responsible government, with a consequent limitation of direct control from "Home."

The acquisition of Australia and New Zealand was primarily due to the enterprise of Captain Cook, R.N., about 1770.

Australia was first utilized as a penal settlement, and New Zealand was first colonized under the auspices of a company formed by Wakefield. It will be enough to say that here, as in Canada, the grant of responsible government has been unconditionally made.

South Africa, originally only a port of call for East India merchantmen, belonged to the Dutch, but finally passed to England in 1814. The achievement of political independence did not occur till 1910, the delay being due in the main to the differences of opinion existing between the English and the original Dutch burghers. These differences of opinion between the Boer republic and the English led to war, which, ending in 1902, resulted in the incorporation of the Republics in the Empire. Though divergence of opinion still exists, there is reason for hope that a final and satisfactory solution of the many difficulties inherent in the original settlement of the country will be found along constitutional lines.

Apart from these larger acquisitions of territory, there remain a large number of smaller places—Gibraltar, Malta and Aden and a host of others, mainly islands, all serving as convenient stepping-stones on the main sea routes of the world.

Singapore, acquired by Sir Stamford Raffles in 1819, possesses one of the finest harbours in the world and controls the sea routes of the Farther East.

Napoleon's invasion of Egypt and the opening of the Suez Canal some fifty years later and the mismanagement of that country by the native rulers led Great Britain to intervene in the internal affairs of Egypt. This occupation, which was to

continue until the Egyptians were able to govern themselves, has within recent years been almost terminated.

The Sudan, nominally a province of Egypt, had been allowed to degenerate into disorder and despair, and was finally abandoned. At the end of the last century it was re-conquered by a joint Anglo-Egyptian Expeditionary Force. Its government is a joint responsibility of England and Egypt, though the control is British.

The African continent, opened up to the knowledge of the world by the efforts of Livingstone, Baker, Speke and others, was partitioned towards the end of the nineteenth century between the Powers. France, Germany, Belgium and Great Britain divided the greater part of the continent between them, happily without serious misunderstanding. Portugal, Spain and Italy have secured lesser but, none the less, wide territories.

The era of colonial acquisition briefly reviewed above, and lying between the date of the American War of Independence and the end of the nineteenth century, is spoken of as the period of the Second British Empire, the outstanding characteristic of which is the change in the relations between the Colonies and the Mother Country.

The attainment by the colonies of complete responsibility in matters of local concern was regarded as a necessary step towards total separation. This view was in accord with the general political and economic theories of the "Manchester School" which were predominant in England during the middle of the century.

The reaction from this position is clearly discernible towards the end of the century. The recrudescence of imperialism is shown in the acquisition of the "African Empire" and in the spirit of imperial solidarity exemplified during the Boer War.

The mandated areas in Asia, Africa and the Pacific Ocean consist of ex-Turkish and German territories. These areas, composed of countries in varying stages of development, are administered by Great Britain or certain of the Dominions under the control of the League of Nations, to which body they will be admitted if and when they have made sufficient progress to justify their position as world states.

The Third British Empire whose growth has thus been briefly traced will be found to possess very different characteristics, very different histories, and to be at very different stages of evolution. It bears no resemblance to any other political organization now existing or that has ever yet been tried. The Imperial Conference of 1926, finding it unnecessary to fix so complex and confusing a political organization within the framework of a written constitution, did, however, deem it wise to define the position and mutual relations of the self-governing communities of Great

Britain and the Dominions. "They are," the report states, "autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any respect of their domestic or external affairs, though united by a common allegiance to the Crown, and freely associated as members of the British Commonwealth of Nations."

The total area of the Empire is approximately 12,500,000 square miles in extent, and contains a population of upwards of 450,000,000. This area and population represent nearly one-fifth of the area and population of the entire globe.

In Appendix A (p. 7) is given a list of the possessions included within the Empire.

By such varied means has the British Empire reached its apparently final stage of territorial expansion. Its resources of every kind, while as yet imperfectly surveyed and relatively undeveloped, are practically illimitable. The development of these potentialities, political, social and economic, will make the highest demands upon the organizing ability of its peoples.

The first requirement of those upon whom this task is laid is security within and from without.

The then Prime Minister (Mr. Baldwin), speaking at the Imperial Conference of 1926, said: "It is necessary to realize that modern war is no longer the matter of navies and armies of professional sailors and soldiers, but one in which all the resources of a nation may have to be engaged. This tendency is fully recognized in the leading countries of Europe and in the United States. Broadly speaking, the work divides itself into two main branches concerned with the co-ordination of the fighting services and the auxiliary civilian departments."

Difficult as is this work for any nation, it is inestimably more so for the Empire whose economic life can reach its fullest development only in peace, whose political evolution is making the co-ordination of its defence services more difficult of achievement, and whose territorial expansion raises strategical problems of the greatest complexity and peculiar to itself.

Modern war, in ceasing to be an art, has developed into a business. In business success depends upon organization to secure that the maximum use is made of the contribution of every unit engaged in production.

An endeavour is made in the succeeding pages to set out the chief contributions of the principal components of the Empire towards the common task of defence and to consider the means whereby such efforts are organized to produce their maximum result.

APPENDIX A.

Area and Population of British Dominions.

Dominions by Continents.	How Acquired.	Date.	Estimated Area (sq. miles).	Estimated Population.	Capital.	Population of Capital.
Europe.						
Isle of Man	Purchase	1827	230	60,000	Douglas	20,200
Channel Islands	Duke of Normandy	1066	70	90,000	—	—
Malta and Gozo	Treaty Cession	1814	120	225,000	Valletta	22,500
Gibraltar	"	1713	2	22,000	—	—
Asia.						
Indian Empire	Conquest and Cession	1757-1897	1,900,000	320,000,000	Delhi	305,000
Ceylon	Treaty Cession	1801	25,500	4,500,000	Colombo	250,000
Straits Settlements	"	1785-1909	1,660	—	Singapore	470,000
Federated Malay States	Protectorate	1874-1888	27,700	3,480,000	Kuala Lumpur	80,000
Other Malay States	"	1909	24,800	—	—	—
Hong Kong	Treaty Cession	1842-1906	390	875,000	Victoria	465,000
Weihaiwei	"	1898	300	160,000	—	—
North Borneo	Cession	1877	31,200	260,000	Sandakan	—
Brunei	Treaty Cession	1888	2,500	30,000	Brunei	10,000
Sarawak	British Raja	1888	50,000	600,000	Kuching	30,000
Cyprus	Annexation	1914	3,600	311,000	Nicosia	19,000
Palestine	Conquest & Mandate	1914-1918	9,000	800,000	Jerusalem	63,000
Africa.						
Cape Province	Treaty Cession	1814	277,000	—	Cape Town	210,000
Natal	Annexation	1843	35,300	—	Pietermaritzburg	37,000
Transvaal	"	1900	110,400	7,000,000	Pretoria	75,000
Orange Free State	"	1900	50,000	—	Bloemfontein	45,000
South West Protectorate	Conquest	1914	322,000	228,000	Windhoek	8,000
Basutoland	"	1895	275,000	153,000	Maseru	2,300
Bechuanaland	"	1889	149,000	900,000	Mafeking (Cape)	—
Southern Rhodesia	"	1889	291,000	1,200,000	Salisbury	7,500
Northern Rhodesia	"	1889	4,000	210,000	Livingstone	—
Gambia	Treaty Cession	1807	79,000	2,030,000	Bathurst	10,000
Gold Coast	"	1872	34,000	1,541,000	Accra	40,000
Sierra Leone	"	1801	336,000	19,000,000	Freetown	45,000
Nigeria and Cameroons	Treaty Cession	1884	68,000	300,000	Lagos	—
Somaland	Cession and Conquest	1888-1918	200,000	2,530,000	Berbera	—
Kenya	Treaty Cession	1894	223,500	3,145,500	Nairobi	24,000
Uganda	"	1914-1918	365,000	4,122,000	Entebbe	—
Tanganyika	Conquest	1890	1,020	200,000	Dar-es-Salaam	75,000
Zanzibar	"	1891	38,000	1,200,000	Zanzibar	—
Nyasaland	"	1891	38,000	1,200,000	Blantyre	7,500
Sudan	Conquest	1898	1,015,000	6,000,000	Khartoum	34,000
Mauritius	" and Cession	1810-1814	720	384,000	Port Louis	50,000
Seychelles	Treaty Cession	1814	150	25,000	Victoria	—
St. Helena	Conquest	1673	47	3,800	Jamstown	1,500
Ascension	Occupation	1815	38	150	—	—
America.						
Ontario	Conquest and Cession	1759-1763	407,260	2,934,000	Toronto	525,000
Quebec	"	1759-1763	700,850	2,361,000	Quebec	95,000
Nova Scotia	"	1697-1713	28,500	524,000	Halifax	60,000
New Brunswick	Treaty Cession	1763	28,200	388,000	Fredericton	8,000
Prince Edward Island	Conquest	1765-1763	2,200	89,000	Charlottetown	13,500
British Columbia	Settlement	1670	355,900	525,000	Victoria	40,000
Manitoba	"	1813	251,900	610,000	Winnipeg	120,000
Alberta	"	1670	255,300	588,000	Edmonton	60,000
Saskatchewan	"	1670	251,700	758,000	Regina	35,000
North-West Territories	"	1670	1,250,000	8,000	—	—
Newfoundland	Treaty Cession	1583	162,750	263,000	St. John's	40,000
Jamaica	Conquest	1655	4,200	86,300	Kingston	63,000
Bahamas	Settlement	1659	4,400	60,000	Nassau	—
Leeward Islands	"	1623-1659	750	14,000	St. John's	7,000
Windward Islands	Cession	1763-1783	510	162,000	St. George's	—
Barbados	Settlement	1605	170	156,000	Bridgetown	14,000
Trinidad and Tobago	Conquest	1797	1,860	365,000	Port of Spain	64,000
British Guiana	" and Cession	1803-1814	90,000	301,000	Georgetown	56,000
British Honduras	"	1798	8,600	46,000	Belize	18,000
Bermuda	Settlement	1612	20	24,000	Hamilton	2,500
Falkland Islands	Treaty Cession	1771	4,618	3,900	Port Stanley	900
South Georgia, &c.	Occupation	1771	3,000,000	—	—	—
Oceania.						
New South Wales	Settlement	1788	310,000	2,265,000	Sydney	1,100,000
Victoria	"	1824	88,000	1,667,000	Melbourne	900,000
South Australia	"	1836	380,000	495,000	Adelaide	300,000
Queensland	"	1824	670,500	842,000	Brisbane	250,000
Tasmania	"	1803	26,420	214,000	Hobart	55,000
Western Australia	"	1828	976,000	366,000	Perth	180,000
North Australia	"	—	287,227	—	Darwin	—
Central Australia	"	—	236,393	4,085	Alice Springs	—
Papua	Annexation	1884	90,540	360,000	Port Moresby	—
New Zealand	Settlement & Conquest	1845	105,000	1,434,000	Wellington	120,000
Fiji	Cession from Natives	1874	7,500	157,000	Suva	13,000
Pacific Islands	Cession and Conquest	1893-1914	12,500	200,000	Suva (Fiji)	—

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CHAPTER II

POLITICAL ORGANIZATION OF THE BRITISH EMPIRE

A. Constitution and Administration of Internal Affairs.

THE British Commonwealth of Nations whose growth was briefly sketched in the first chapter embraces roughly one-fifth of the habitable area of the globe and one-fifth of its inhabitants. It has been built up by various means—by conquest, by cession, by annexation or by purchase, and these methods have been put into operation at various times. It possesses within its boundaries lands which are suitable for the permanent occupation of white men and others that are as definitely unsuitable; every type of civilization or religion, every known tongue, are to be found. Its growth, social, economic and constitutional, has been continuous, if not regular, and in the constitutional sphere there is reason to anticipate that progressive evolution will proceed at a rate not slower than in the past.

What, then, is the framework that is at once strong enough to bear this burden, yet elastic enough to allow of so wide and deep an evolutionary process to go on within it? The answer will be found in the constitution of the Empire.

In Professor Maitland's words, "the Constitution does not nowadays consist merely of the King and Parliament, Privy Council, Courts of Law and some purely executive officers, such as sheriffs, obeying their command. The governmental powers, the subordinate legislative powers of the great officers, the secretaries of state, the treasury, the board of trade, etc. . . . these have become of the greatest importance, and to leave them out of the picture is to make the picture a partial, one-sided, obsolete sketch." Put briefly, the constitution may be held to mean the whole complex system whereby the government of the Empire and the administration of its public business is effected, though it might be objected upon purely theoretical grounds that the administration of public business is not part of the constitution.

From a purely theoretical viewpoint, the constitution of Great Britain may be defined as the King and Parliament—*i.e.*, that it is monarchical and parliamentary—and it is these two features that constitute the golden threads that are so plainly discernible in the complicated features of Empire Government. The King is King for each and all, and the supreme unchallenged and

unchallengeable authority of the Legislature, whether expressed or implied, is applicable to them all.

As is well known, the constitution is largely unwritten and flexible, and has passed and is passing through an evolutionary process of adaptation to the needs of the Empire at large. The general constitutional framework remains, however, unchanged, and within it will be fitted the new machinery of government necessitated by the alteration of the status of the Dominion.

In theory the principal executive officer of the State is the King. Kingship has, however, undergone a considerable evolutionary process, with the result that the King is now only the formal head of the executive. "The King," it is said, "reigns but does not rule." This loss in executive power has been more than made up in the increase of the personal authority of the monarch and "the political significance of the Crown as the symbol of Imperial unity is a factor of the first importance in the political evolution of the British Commonwealth" (Marriott).

The Cabinet, of which the Prime Minister is chairman, constitutes the political executive. Ministers, and not the King, are responsible to Parliament for their acts. Apart from the personal secretariat of the Prime Minister, the work of the Cabinet is assisted by a Secretariat, the Secretary of which is also Secretary of the Committee of Imperial Defence. The functions of the Secretariat are to record the transactions of the Cabinet and to transmit its decisions to the appropriate departments.

With certain exceptions, Ministers have charge, also, of one or other of the great departments of state.

While the political heads of these departments are liable to change (*e.g.*, on any change of Government), a permanent administrative body must exist to carry out the day-to-day practical working of a department of state. There is thus an association of "amateur" and "professional" in which the former outlines a policy and leaves to the latter the working out of the practical details. Apart from the professional skill brought to bear by the civil servant upon the problems of government, the permanency of his service has been a considerable factor in preserving continuity of administration and of policy during the years of rapid political and constitutional evolution.

It was said above that the British constitution is particularly marked by its flexibility and capacity for alteration or amendment.

Parliament has supreme power save over itself, and can introduce any constitutional changes that seem desirable to it subject only to the maintenance of the Monarchy and the Legislature. Parliament has power to delegate its authority to legislate to other bodies, but only so long as these latter exercise their powers in and through the same constitutional channels as the granting power. It is equally clear that this delegation of power can be

extended to other bodies as and when they become able to exercise it, and it may be ultimately a constitutional fact that the Crown is advised not by seven but by seventy Prime Ministers.

Thus Mr. Asquith (Lord Oxford and Asquith), speaking at the Imperial Conference in 1911, was able to give expression to a constitutional fact in the following words: "Whether in this United Kingdom, or in any of the great communities you represent, we each of us are, and we each of us intend to remain, master in our own household. This is, here at home and throughout the Dominions, the life-blood of our Imperial policy." He spoke here of the "local autonomy" of each unit in special reference to the self-governing Dominions which had not at that time attained to the full "Dominion Status" as understood to-day.

As is well known, this grant of representative government and institutions was first made to Canada in virtue of the recommendations of the Durham Report, and it has subsequently been extended to the other colonies mainly inhabited by the white peoples; all who have received this grant being spoken of as Dominions.

Between 1914 and the present date (1931), the "local autonomy" of the Dominions has been widely extended. The new "Dominion status" now implies not merely representative institutions, but entire responsibility.

The Government of India.

Though for purposes of imperial or international representation India is held to be geographically and politically identical, in actual fact there is a considerable difference between the two terms.

Politically India contains a large number of states, which may be broadly divided into three main categories—

- (a) British territory;
- (b) States that are under British administration though not annexed;
- (c) A large number (about 650) native states owning a greater or lesser degree of independent sovereignty secured to them by treaties with the Crown and exercising under varying degrees of restraint the management of their internal affairs.

The Government of India is undergoing considerable change, and may be taken to be in a position halfway between that obtaining in a Crown Colony and that enjoyed by a Dominion.

The present position of the Government of India arises from the reforms initiated by the Government of India Act, 1915, and subsequently amended in 1919, the latter amendments being the result of the report upon the general political situation in India

drawn up by Mr. Montagu and Lord Chelmsford, who at that time were respectively Secretary of State for India and Viceroy.

For convenience the Government of India as at present existing may be divided into three sections:—

(a) THE HOME GOVERNMENT.—Though it tends to interfere less and less directly in the Government of India, the supreme control rests with the British Parliament, to whom the Secretary of State for India, being a Cabinet Minister, is responsible.

The Secretary of State, assisted by an advisory council of twelve (of whom three are Indians) is responsible in England for the conduct of all the business of the Government of India.

The advisory council is composed of such persons as are best qualified to assist the Secretary of State by reason of their especial knowledge of Indian conditions. There is a military secretary to the Secretary of State and a military member of Council acting in an advisory capacity independent of the War Office. This officer holds high rank in the Indian Army. The council meets weekly. The tenure of appointment is for five years.

(b) THE GOVERNMENT OF ALL INDIA.—The executive Government of India is by statute vested in the Governor-General-in-Council.

The council is composed of eight members, three of whom are Indians. Each member is in charge of one of the Departments of State.

The responsibility for all military matters rests with the Governor-General-in-Council, the Commander-in-Chief, who is nominated a member of the council, being the principal executive officer.

Under the Act of 1919, the supreme legislature for all India is composed of the Governor-General, the Council of State, and the Legislative Assembly.

The Council of State comprises 60 members, 34 of whom are elected, and the Legislative Assembly 145 members, 104 of whom are elected.

The Legislative Assembly possesses large powers, including wide financial control over the Annual Budget, though expenditure on the Army and the Foreign Department are outside its competence. The Council of State possesses the same powers of legislation as the Assembly, but not in respect of finance.

(c) THE PROVINCIAL LEGISLATURES.—In the provinces a system of government known as dyarchy was introduced. Under this system an elected legislature with responsible ministers exercises supreme control over certain subjects, referred to as the "transferred" subjects; certain other subjects are, however, "reserved" to the Governor of the province and his executive council.

As an essential safeguard both the Governor-General and the provincial governors have the power of "certifying" a bill, by which certification a bill, though rejected by the legislatures, becomes operative if it is considered to be essential to the well-being or tranquility of the province or of all India.

The remaining portions of the British Empire may, as regards their constitutional position, be divided into three wide categories : (1) Crown Colonies ; (2) Protectorates ; and (3) Mandated Areas.

The government of a Crown Colony, originally the simple and direct rule of a governor, has subsequently undergone considerable modification, and may be considered broadly as an intermediate position between the old system noted above and that implied by Dominion status.

Whatever may be the type or degree of representative government possessed by a colony, the responsibility rests with the Governor or similar officer, who is himself responsible to the Colonial Office and hence to the Imperial Parliament. Appendix A (p. 25) shows the various classifications of government existing in the Crown Colonies.

The term "protectorate" has no clear definition in British law. It does not imply possession or annexation. The common and distinctive mark of all protected states is that their relations with foreign states are under the control of the protecting power.*

In general terms, the Crown may exercise complete control over a Protectorate, the jurisdiction of the Crown being exercised through a Resident or High Commissioner.

The responsibility of this officer is through the Secretary of State for the Colonies or for Foreign Affairs to the Imperial Government. In certain cases the responsibility is not to the Imperial but to a Dominion Government, notably to that of the Union of South Africa in the cases of Basutoland, Bechuanaland and Swaziland.

The degree of control over the internal affairs of the protected state may vary considerably as between the conditions obtaining in Sarawak to those in the protected states in Africa in which virtual Crown Colony Government is set up.

In the mandated areas allotted under Article 22 of the Covenant of the League of Nations, conditions of government vary considerably in accordance with the degree of civilization and development of the areas mandated. This condition varies from that of 'Iraq, which is an independent state under the mandatory charge of Great Britain, and now awaiting admission by her good offices

* "The one common element in protectorates is the prohibition of all foreign relations except those permitted by the protecting state" (Lord Justice Kennedy, *Rex v. Crewe*).

to the League of Nations, to the condition obtaining in South-West Africa, which is incorporated into the Union as an integral part of that State.

Summary.

The British Empire may thus be separated into three main divisions—

- (a) The British Commonwealth, comprising the freely associated autonomous communities of Great Britain, Canada, Newfoundland, Australia, New Zealand, South Africa and the Irish Free State.
- (b) The Indian Empire. Half-way between (a) and (c) in respect of its internal affairs.
- (c) The Colonial Empire, for which Great Britain and certain others of the associated states accept responsibility. This Empire comprises the Crown Colonies, Protectorates and the Mandated Areas.

B. Foreign Affairs.

The summary above illustrates the present position that has been reached in the evolution of the constitution of the Empire ; in this it will be seen that in the control of their internal affairs some parts have reached finality, others are in an intermediate position, and all, as they show themselves capable, may reach complete control.

Indeed, this evolution towards full control may be held to be the guiding principle of imperial progress. It may be noted here that this completeness of control has in the past been accompanied by the acceptance of the responsibility for local defence and internal security. In this matter, as in the wider question of imperial defence, power and responsibility are concomitant.

In the region of external affairs, however, the position is not so simple or so clearly evolved.

Up to 1916 the Empire had been regarded in respect of its relations with foreign powers as a unitary state, the conduct of its foreign affairs being recognized as within the exclusive competence of Great Britain, though in 1911, at meetings of the Committee of Imperial Defence, the Dominion statesmen of the self-governing colonies had been made fully cognisant of the foreign policy of Great Britain with particular reference to the understandings with France and Russia on account of the growing hostility of Germany, and also to the action proposed to be taken by Great Britain to secure the renewal of the Japanese Treaty.

In 1917 the broad lines upon which Dominion responsibility in foreign affairs should develop were contained in a resolution to

the effect that such relations, while thoroughly preserving all existing powers of self-government and complete control of domestic affairs, should be based upon a full recognition of the Dominions as autonomous nations of an Imperial Commonwealth, and of India as an important portion of the same ; should recognize the right of the Dominions and India to an adequate voice in foreign policy and in foreign relations ; and should provide effective arrangements for continuous consultation, as the several Governments may determine.

When this declaration was made and during 1918, Dominion Ministers and Indian Representatives were, with the British Cabinet, jointly responsible for the conduct of imperial affairs, including foreign policy. In 1919, the Imperial War Cabinet becoming the British Peace Delegation, Dominion Prime Ministers were able not only to express their views upon questions of importance peculiar to the countries they represented, but also to share with British delegates the responsibility for the formulation of British policy, and as separate nations signed the Peace Treaty in which these views were *inter alia* embodied.

In many spheres of foreign affairs and relations the responsibilities of complete nationhood have been assumed by the Dominions and India. All send delegations to attend the Assembly of the League of Nations, at which they are entitled in theory to register a vote contrary to that cast by Great Britain, and in practice frequently do.

Canada, South Africa and the Irish Free State have already appointed their own representatives in the capitals of foreign states.

The Dominions have negotiated and signed separate commercial treaties with foreign states, and all have erected tariffs even against the goods produced by or manufactured in other parts of the Commonwealth.

The Dominions, and India in part, undertake their own local defence while asserting and, in the case of the Chanak incident, upholding their freedom to grant or withhold armed assistance in any conflict in which the Empire may be involved.

The present position and relation of the Dominions and of Great Britain were defined at the Imperial Conference of 1926 in the following terms : " Their positions are autonomous countries within the British Empire, equal in status, in no way subordinate one to the other in any aspect of their domestic or external affairs, though united to the Crown and freely associated as members of the British Commonwealth of Nations. Every self-governing member of the Empire is now the master of its own destiny. Equality of status, as far as Britain and the Dominions are concerned, is thus the root principle governing our international relations."

The same Conference, however, found that equality of status did not necessarily extend to function, and agreed that in the spheres both of foreign policy and defence the major share of responsibility rested, and for some time must continue to rest, with His Majesty's Government in Great Britain.

It was recognized that Great Britain, possessing as she does great experience in, and the necessary machinery for, the conduct of foreign policy, together with the force to give it the necessary weight, was most fitted to represent the Imperial point of view in foreign politics.

The position thus accorded to Great Britain not only demonstrated the unity of imperial policy, but served to prove the essential truth of the main principles which have guided it. These, in brief, are—

(a) **WORLD PEACE.**—By 1902 the process of imperial expansion sketched in the first chapter had been completed, and at the Imperial Conferences of 1903, 1907, 1911, steps were taken to consolidate the imperial possessions and to place them in a position to withstand the attack upon them that was expected to be made by Germany. Since the war it has been recognized that the Empire's lands are large enough and that the main task of coming years will be that of consolidation and of the development of material resources. Communications will be speeded up to enable large transferences of population between Great Britain and the Dominions to take place. For the realization of this programme of domestic development peace is clearly necessary.

(b) **THE POLICY OF SECURITY.**—While war has been in the past one of, but by no means the principal factor in, the growth of the Empire, its maintenance has rested upon a close adherence to the policy of security known as the balance of power. This policy aims to prevent any single European nation securing a position of predominant strength by land or sea and so being in a position to threaten these islands, the headquarters of imperial defence, from the Low Countries. The ability to maintain this balance has mainly rested upon the value of the British Fleet in any alliance to which this country has subscribed. It may be said that this policy is almost a matter of instinct, a matter-of-fact acceptance of the ability of sea-power to keep these islands free from invasion.

Second only to the need for freedom from invasion is the necessity of keeping open the sea communications of the Empire. In pursuance of this policy, Great Britain was led to undertake the control of Egyptian affairs since through Egypt run those lines of sea communication which are vital to imperial defence if a war for existence were to be reluctantly undertaken. This security of the sea routes is also equally vital to the maintenance

of world trade, as well as for the security of the intricate systems of intercommunication essential for the conduct of imperial commerce. "There are," says Raleigh, "two ways in which England may be afflicted. The one by invasion in which we shall cast lots for our garments. The other by the impeachment of our trades by which trades all commonwealths flourish and are enriched." True as this was when it was written and when England was more or less self-supporting, it is a hundredfold more true to-day.

(c) THE POLICY OF TRUSTEESHIP.—Little need be said in explanation of this principle. Its results are to be observed in the present position of the Dominions, as may be its present working in the government and administration of the backward races of the Empire.

These races are guaranteed the possession of their lands; their trade is fostered and increased; they are provided with such degrees of western education as will, while preserving the best in their native customs, allow them ultimately to undertake through their own chiefs a full measure of self-government. These principles have received striking vindication in recent years. In the main, they form the basis of the regulations drawn up by the League of Nations for the control and administration of mandated territories.

The General War proved to the full the truth and the wisdom of the policy outlined in the above paragraphs.

Because Germany, by the possession of the greatest land forces in Europe and of a navy second only to that of Great Britain, had upset the balance of power and gravely threatened British security by the violation of Belgium, Great Britain was compelled to declare war, the successful conclusion of which was in a great measure due to the unhesitating support of the Dominions and of the dependent Empire.

Whether the war and the events in the years following will produce any deep alterations of imperial policy it is not possible yet to say, but certain factors of great importance in their bearing upon it must be noticed.

1. The League of Nations.

The League of Nations is an association of states which have pledged themselves through signing the Covenant of the League not to go to war before submitting their disputes with each other or states not members of the League to arbitration or inquiry, and a delay of from three to nine months.

Furthermore, any state violating the pledge is automatically in a state of outlawry with the other states, which are bound to

sever all economic and political relations with the defaulting member.

The members of the League have also pledged themselves to co-operate over a wide range of economic, social, humanitarian and labour questions.

Fifty-four states are members of the League. The Council of the League is composed of four permanent members—the British Empire, France, Italy and Japan—and four non-permanent members elected annually by a majority of the Assembly.

Every state member of the League is entitled to be represented by a delegation to the Assembly. Each delegation votes as a single unit. The Assembly meets at the headquarters of the League at Geneva on the first Monday in September. The Assembly divides itself into six committees, dealing with various subjects.

The Assembly may be summoned at any time and in any place to deal with extraordinary matters of extreme urgency.

The League possesses a permanent secretariat under a Secretary-General. Its official languages are English and French.

2. Naval Parity with the United States of America.

Naval parity between Great Britain and the United States of America was recognized by the Washington Conference agreement. It may not be considered that war will take place between Great Britain and the United States of America, but the question of the doctrine of the freedom of the seas in support of which the U.S.A. was compelled at different times to fight against France, Great Britain and Germany, may arise. As it was proposed, in deference to the wishes of certain of the Dominions, to abandon the alliance between Great Britain and Japan, the ratio between the fleets of Great Britain and the U.S.A. has been determined by the general agreements entered into at Washington in 1922 and at London in the present year.

3. The Position of Great Britain in respect of Attack from the Air.

The danger to Great Britain of attack by air is now universally recognized, and the air forces have an important part to play in the defence of the country. This is a fact of overwhelming importance since no longer is Great Britain an island relying upon Nature for her first line of defence.

The development of air communications is of first-rate importance to a world-wide empire, and lays upon this country the additional and heavy responsibility of safeguarding these air lines throughout their extreme range and extent.

4. Additions to Empire Responsibilities.

The elimination of Germany and Turkey, as first-class Powers, has involved additions, in the form of mandates, of one million square miles of territory.

Though these mandated areas are held under the authority of the League of Nations and careful rules have been drawn up regarding them they constitute additional responsibility in matters of policing, internal security and administration, the areas being for the most part backward in political and material development.

— In respect of one of these areas—namely, 'Iraq—responsibility under the League is shortly to be surrendered.*

5. The Growth of the Spirit of Nationality.

The growth of nationalism among the people of the Middle East, in China, India and Afghanistan, affects deeply British interests and makes the maintenance of the *status quo* increasingly difficult. The growth of the national spirit has everywhere taken the form of violent reaction against the West, though it has drawn its strength from the adoption of western political methods and by the copying of western military technique.

While these world-wide movements must of necessity require many years for their full implications to be realized and before the changes that they may cause in the national policy can be fully met, the general direction of these changes can be discerned.

In the first place, the horizons of diplomacy have been enlarged, the European state systems have given way to a world-wide system. The institution of the League of Nations is an acknowledgment of the fact that the European system has been replaced by a system world-wide in its application, and, even while this is taking place, modern science is daily reducing the size of the world and bringing its peoples into closer contact.

The difficulties inherent in the closer contact have been increased by the constitutional changes which have taken place within the British Empire. Within this narrowing but yet world-wide system there has grown the smaller world system of the British Commonwealth of States.

The rise to nationhood of the Dominions has brought them into direct contact, as separate individual states, with the problems of the larger world.

The interests of the various states, members of the Commonwealth, in world affairs would clearly differ. The problem, for instance, of inter-imperial migration affects different Dominions in different ways. Australia, again, is vitally concerned in the Pacific

* See Appendix B.

problem, which probably has no individual concern for the Irish Free State. Canada is more concerned with the problems of the American Continent, and is clearly showing a tendency to withdraw from European interests, though her increasing interests in the Pacific bring her within the orbit of the politics of the Far East.

The rise to nationhood of the Dominions has increased the number of points of contact between the Empire and the world; the advance of science has made these contacts more intimate and their reactions more rapid.

All these conditions require the setting up of machinery which, while allowing the fullest measure of consultation between the various states, members of the Commonwealth, will not prejudice that rapidity of decision which is often as vital as unanimity of view.

It is necessary, therefore, to secure that there shall be—

- (a) Agreement upon major issues of imperial policy;
- (b) Machinery to establish rapid consultation and decision upon particular cases;
- (c) Machinery whereby measures of defence may be co-ordinated to meet the needs of policy.

Though from time to time various proposals to secure closer federation or for the setting up of an Imperial Council have been made, they have not received general acceptance, and it appears that the machinery necessary to give effect to imperial policy will slowly evolve to meet the Empire's changing needs. The necessity of such machinery was emphasized in a resolution of the 1926 Conference to the effect that "The Governments represented at the Imperial Conference are impressed with the desirability of developing a system of personal contact, both in London and in the Dominion Capitals, to supplement the present system of inter-communication and the reciprocal supply of information on affairs requiring joint consideration. The manner in which any new system is to be worked out is a matter for consideration and settlement between His Majesty's Governments in Great Britain and the Dominions, with due regard to the circumstances of each particular part of the Empire, it being understood that any new arrangement should be supplementary to, and not in replacement of, the system of direct communication from Government to Government and the special arrangements which have been in force since 1918 for communications between Prime Ministers."

The principal means, beside the routine constitutional methods,

for securing agreement and co-ordination at present in existence are—

1. The Imperial Conference.

Imperial Conferences are held in London every four years, and are attended by the Prime Ministers of the Dominions and Indian Representatives under the chairmanship of the Prime Minister of Great Britain.

A brief outline of the various conferences is given as an appendix (p. 29). It should be noted that at these conferences Dominion representatives are able to express their points of view and intentions without having to consider whether they are entirely bound to give effect to them, since the resolutions passed at the conference are not binding and are in no sense regarded as engagements between the parties. These conferences, in addition to the opportunities offered for the reconciliation of conflicting views and for the settlement of disputes of a political or legal nature, make it possible for the executive heads of the various components of the Empire personally to examine the whole field of imperial policy and to secure agreement upon major issues.

2. The Dominions Office.

The Dominions Office, with its counterpart in the Departments of External Affairs already established in several of the Dominions, is mainly responsible for securing consultation and co-operation in the conduct of imperial business. In 1925 the office of Secretary of State for the Dominions was created, and has in 1930 for the first time been held by a Minister who is not at the same time Secretary of State for the Colonies.

3. The Committee of Imperial Defence.

The composition of the Committee of Imperial Defence and its place in imperial military organization is dealt with in a later chapter.

The Committee of Imperial Defence, acting as a military and political "clearing house," is in a position to indicate the practical steps whereby measures of defence may be co-ordinated with the needs of policy.

In addition to the above means for settling major issues, minor questions are settled by *ad hoc* conferences, of which the Naval and Military Conference of 1909 is the first example. Proposals for the creation of a General Staff were unanimously adopted by the Conference of 1907, it being resolved that "this Conference welcomes and cordially approves . . . the need of developing for the service of the Empire a General Staff, selected from the

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forces of the Empire as a whole, which shall study military science in all its branches, shall collect and disseminate to the various Governments military information and intelligence, shall undertake the preparation of schemes of defence on a common principle" (C.M.D. 3523, 1907). By 1910 an Imperial General Staff had become a recognized part of imperial military organization, and in 1912 Canada and Australia sent officers to a Dominion Section of the General Staff in London.

As regards the Colonial Empire, an interesting innovation is the Conference held every three years in London of the Colonial Governors.

Omitting minor differences, the general scheme of Imperial Government and administration may be conveniently set out in diagrammatic form as follows :—

	<i>Internal Affairs.</i>	<i>Local Defence.</i>	<i>External Affairs.</i>	<i>Imperial Defence.</i>
A. Great Britain. Canada. Newfoundland. Australia. New Zealand. South Africa. Irish Free State.	Complete control.	Complete control.	Consultative and Co-operative control.	
			Main responsibility—Great Britain.	
B. India.	"All India" modified control.	Great Britain.	Great Britain.	Great Britain.
	"Provincial"—complete control except in reserved subjects.			
C. Crown Colonies. Protectorates.	Varying degrees of modified control.	Great Britain.	Great Britain.	Great Britain.

Imperial Policy and Imperial Defence.

Before considering the organization that has been evolved to secure the defence of the British Commonwealth, it may simplify matters if the facts already brought out are interpreted in their bearing upon the relationship between policy and defence.

Though during the eighteenth and up to the end of the nineteenth century a steady progress of territorial expansion had gone on, the ideal of an organized and consolidated Empire had not yet emerged; indeed, to many minds the granting of "home" rule to the Colonies was regarded as the first step towards their complete separation from Great Britain.

The rising power of Germany, the first Empire to be built up upon a preconceived and scientific basis, not only threatened the loose aggregation of states comprising the British Empire, but also served to point out the possibilities underlying scientific consolidation.

While the idea of a closely federated Empire was unattractive to Great Britain and the Colonies, the need for consultation upon important questions and the value of co-ordination in matters of defence were shown by the inauguration of the Colonial Conference system in 1887. This system of consultation at regular intervals was maintained and developed until in 1911 imperial foreign policy was frankly explained to the Dominions and joint action was taken to meet the then unconcealed hostility of Germany.

Since the war the situation has altered materially. Though the Conference system has been maintained, it is now a frank exchange of views as between co-equal and autonomous communities each of whom has its own point of view upon foreign policy; the harmonization of which views has occasionally, as in the case of the Anglo-Japanese Treaty, been difficult of achievement.

In addition to these extra points of contact with the world at large, considerable territories have been added to the Empire involving increased responsibilities of defence at a time when the tremendous financial burden left by the war has made necessary large reductions in the fighting services. Though the reductions in terms of time of the distances which separate the parts of the Empire should facilitate the reinforcement of any part attacked, Great Britain, the headquarters of the man-power, industry, finance and shipping of the Empire, has become dangerously vulnerable to attack from the air, involving additional and heavy outlay for air defence. It will be seen, therefore, that whereas in the political sphere the principle of the dispersion of the responsibility has been followed with a consequential enlargement of the points of possible friction, modern military strategy which aims to strike a blow at the "head" rather than at any one of the "limbs" has forced upon Great Britain the necessity of concentrating and maintaining three defence forces as against two before the war.

It will thus be seen that, not only have the problems of imperial defence become more complicated by reason of the internal

developments of the Empire, but the immense growth in the power of modern states has radically changed the conception of war itself.

Not only have armed forces in themselves grown and developed with the growth of the states of which they form a part, but modern war has ceased to become purely the business of soldiers, sailors and airmen. When a vital issue is at stake, war has become a great social upheaval affecting every aspect of national life and making demands upon all the national resources.

Under circumstances such as these, a statement of the general principles underlying imperial defence was both in the political and military spheres an urgent necessity. The Imperial Conference of 1923 embodied these principles in the following series of resolutions :—

“ 1. The Conference affirms that it is necessary to provide for the adequate defence of the territories and trade of the several countries comprising the British Empire.

“ 2. In this connection the Conference expressly recognizes that it is for the Parliaments of the several parts of the Empire, upon the recommendations of their respective Governments, to decide the nature and extent of any action which should be taken by them.

“ 3. Subject to this provision, the Conference suggests the following guiding principles :—

- (a) The primary responsibility of each portion of the Empire represented at the Conference for its own local defence.
- (b) Adequate provision for safeguarding the maritime communications of the several parts of the Empire and the routes and waterways along and through which their armed forces and trade pass.
- (c) The provision of naval bases and facilities for repair and fuel so as to ensure the mobility of the fleets.
- (d) The desirability of the maintenance of a minimum standard of Naval Strength—namely, equality with the Naval Strength of any foreign power, in accordance with the provisions of the Washington Treaty on Limitation of Armament as approved by Great Britain, all self-governing Dominions, and India.
- (e) The desirability of the development of the Air Forces in the several countries of the Empire upon such lines as will make it possible, by means of the adoption, as far as practicable, of a common system of organization and training and the use of uniform manuals, patterns of arms, equipment and stores (with the exception of the type of aircraft), for each part of the Empire as it may determine to co-operate with other parts with the least possible delays and the greatest efficiency ”
(C.M.D. 1987, 1923).

APPENDIX A.

VARIOUS CLASSIFICATIONS OF GOVERNMENT IN THE COLONIES.

1. *Colonies with no Legislative Council.*—Gibraltar and St. Helena.

2. *Colonies with Wholly Nominated Elective Councils.*—(a) Official majority—*i.e.*, majority of Government officials : Falkland Islands, Gambia (with Protectorate of same name, under same Governor and Legislative Council), Gold Coast, Hong-Kong, Northern Rhodesia, Seychelles ; (b) unofficial majority—*i.e.* of nominated citizens not being Government officials : British Honduras.

3. *Colonies with Partly Elected Legislative Council with Minority of Elected Members.*—Fiji, Grenada, Jamaica, Kenya, Leeward Islands Federation, Mauritius, Nigeria (to be distinguished from the Protectorate of the same name, which, however, is administered by the same Governor, Executive Council and Legislative Council), St. Lucia, St. Vincent, Sierra Leone (with Protectorate of the same name, administered by the same Governor and Legislative Council), Straits Settlements, Trinidad.

4. *Colonies with Partly Elected Legislative Council with a Majority of Elected Members.*—British Guiana, Ceylon, Cyprus.

5. *Colonies with Wholly Elected House of Assembly and Nominated Legislative Council.*—Bahamas, Barbados, Bermuda.

1. *British Protectorates in Africa.*—

Ashanti and the Gold Coast Territories.

Sierra Leone, Gambia, Somaliland, Uganda, Kenya and the Nigerian Protectorate.

Protectorates under the South African High Commissioner. Basutoland, Bechuanaland, Swaziland.

2. *British Protectorates in Asia and the Pacific.*—

The Federated Malay States of Perak, Selangor, Negri Sembilan Pahlang.

The Borneo Protectorate of Brunei, North Borneo and Sarawak. Johore.

3. *Protectorates of the Western Pacific*, including Tonga Islands, Savage Island, the Banks and Torres Island, New Hebrides.

APPENDIX B.

THE MANDATES AND THE MANDATORY SYSTEM.

Under Article 119 of the Treaty of Versailles for Germany and later in the Treaty of Lausanne for Turkey, these Powers renounced in favour of the principal Allied and associated Powers all rights and titles to certain possessions—in the case of Germany, her overseas colonies; and in that of Turkey, certain territories in the Middle Eastern area. Article 22 of the Covenant of the League determined that: "To those colonies and territories which as a consequence of the late war have ceased to be under the sovereignty of the states which formerly governed them and which are inhabited by people not yet able to stand by themselves under the strenuous conditions of the modern world, there should be applied the principle that the well-being and development of such peoples form a sacred trust of civilization and that securities for the performance of this trust should be embodied in this Covenant."

The best method of giving practical effect to this principle is that the tutelage of such peoples should be entrusted to advanced nations who by reason of their resources, their experience or their geographical position, can best undertake this responsibility, and who are willing to accept it, and that this tutelage should be exercised by them as mandatories on behalf of the League.

The character of the mandate must differ according to the stage of the development of the people, the geographical situation of the territory, its economic conditions and other similar circumstances.

Certain communities formerly belonging to the Turkish Empire have reached a stage of development where their existence as independent nations can be provisionally recognized subject to the rendering of administrative advice and assistance by a Mandatory until such time as they are able to stand alone. The wishes of these communities must be a principal consideration in the selection of the Mandatory.

Other peoples, especially those of Central Africa, are at such a stage that the Mandatory must be responsible for the administration of the territory under conditions which will guarantee freedom of conscience and religion, subject only to the maintenance of public order and morals, the prohibition of abuses such as the slave trade, the arms traffic and the liquor traffic, and the prevention of the establishment of fortifications or military and naval bases and of military training of the natives for other than police purposes and defence of territory, and will also secure equal opportunities for the trade and commerce of other members of the League.

There are territories, such as South-West Africa and certain of the South Pacific islands, which, owing to the sparseness of their population, or their small size, or their remoteness from the centres of civilization, or their geographical contiguity to the territory of the Mandatory, and other circumstances, can be best administered under the laws of the Mandatory as integral portions of its territory, subject to the above-mentioned safeguards in the interests of the indigenous population.

"In every case of mandate, the Mandatory shall render to the Council an annual report in reference to the territory committed to its charge.

"The degree of authority, control or administration to be exercised by the Mandatory shall, if not previously agreed upon by members of the League, be explicitly defined in each case by the Council.

"A permanent Commission shall be constituted to receive and examine the annual reports of the Mandatories and to advise the Council on all matters relating to the observance of the mandates."

The territories thus mandated are as follows :—

<i>Mandate.</i>	<i>Mandatory.</i>	<i>Class.</i>	<i>Ex-Rulers.</i>
Iraq	Great Britain	" A "	Turkey
Syria and Lebanon	France	" A "	"
Palestine and Trans-Jordania	Great Britain	" A "	"
Tanganyika	Great Britain	" B "	Germany
Ruanda-Unindi	Belgium	" B "	"
British Togo	Great Britain	" B "	"
British Cameroons	Great Britain	" B "	"
South-West Africa	Union of S. Africa	" C "	"
French Togo	France	" B "	"
French Cameroons	France	" B "	"
New Guinea	Australia	" C "	"
Samoa	New Zealand	" C "	"
South Sea Islands	Japan	" C "	"
Nauru	British Empire— (Great Britain Australia New Zealand)	" C "	"

Many international complications arose as to the general tenor of the arrangements drawn up for the various classes of mandate, and in particular a dispute between the U.S.A. and Japan concerning the island of Yap which contains an important American cable station. This delayed the entry into force of the mandates until the following dates :—

Class " C," December, 1920. Palestine and Syria, September, 1923

Class " B," July, 1922. 'Iraq, September, 1924.

The agreement regarding 'Iraq differs in form from those of other territories, since the word "mandate" being unpopular in the country there was substituted for it a bilateral treaty between Great Britain and 'Iraq which was submitted for the approval of the Council of the League. Despite the altered form the responsibility of Great Britain is that of a Mandatory Power.

There has, also, been set up a Permanent Mandates Commission of the League of Nations to which body the Mandatory Powers must render an annual report as to the execution of their engagements under their mandate. To this body any complaints of the actions of the Mandatory may be made.

The general arrangements for the control over the mandated areas differ as between the various classes of mandate.

The Class "A" mandates covering Syria, Lebanon, Palestine and Trans-Jordania and 'Iraq all differ as between themselves, but in the main arrangements are made whereby the Mandatory shall render advice and assistance; shall protect, as in the case of the Jews in Palestine, any form of religion peculiar to a people; shall not utilize the mandated areas as bases for military forces. In Class "A" mandates the view is expressed that these areas should soon cease to be under mandatory control and will become independent nations admitted to the League. This state will very shortly be achieved by 'Iraq.

In the case of the Class "C" mandates, the areas are to be governed as "an integral part of the possessions of the Mandatory." Powers holding Class "C" mandates are to regard themselves as trustees for the material and moral welfare and social progress of the inhabitants. The sale of intoxicating liquor, the slave trade and forced labour, and the traffic in arms are forbidden. Military bases may not be established, nor may the native inhabitants be trained as soldiers, except for police purposes or for local defence.

Class "B" mandates correspond in general to the Class "C," but there are added provisions for the maintenance of the "open door." "The Mandatory shall ensure to all nationals of states members of the League of Nations, on the same footing as to his nationals, freedom of transit and navigation and complete economic, commercial and industrial equality."

The total area of the mandated territories is approximately one and one-third million square miles, and the population about twenty millions.

APPENDIX C.

THE IMPERIAL CONFERENCES (1887-1926).

The present system of Imperial Conferences at which the Prime Ministers of the Dominions meet under the chairmanship of the Prime Minister of Great Britain, has in common with most British institutions, been the result of readjustment to changing conditions.

In 1887, in issuing the invitations to the first Colonial Conference, it was stated that "the time had now arrived when an attempt may fairly be made to attain a better understanding as to the system of defence which may be established throughout the Empire" (C.M.D. 5091, 1887). At this meeting, presided over by the Colonial Secretary, questions of defence occupied the chief place, but foreign policy, at that time admitted to lie within the competence of Great Britain alone, was omitted from discussion.

The immediate result of this conference was a ten-year naval agreement with the Australasian Colonies whereby the squadron in Australasian waters was increased, towards the cost of which Australia made a monetary contribution.

About the same time efforts were made to establish on a firm footing the military forces of Australia in which military officers from England were seconded to assist.

In 1897, upon the occasion of the Diamond Jubilee, a further Colonial Conference took place in London, again presided over by the Secretary of State for the Colonies. These last, eleven in number, were represented by their Prime Ministers. Defence questions occupied a prominent place in the discussion, and the Secretary of the Colonial Defence Committee formed in 1887 gave the view of the military experts upon the question of the steps requisite for Colonial defence. (C.M.D. 8596, 1897.)

In the following year steps similar to those already taken in Australia were taken to organize the military forces of Canada on a national basis. In this task, as in Australia, British officers were seconded to assist.

In 1902 the experience gained in the South African War showed that not only in the matter of military preparation and organization was the Empire unprepared, but that "the Regular Army, as organized before the war, was by itself inadequate in strength to the needs of the Empire."

Though difficulty was found in harmonising defence needs with political aspirations, which participation of Colonial forces in the South African War had done much to increase, considerable advance was made in Imperial co-operation for naval defence.

It was also decided that future conferences should, if possible, be held every four years. (C.M.D. 1299, 1902.)

At the conference of 1907 many changes were instituted. The conference, now styled the Imperial Conference, was held to be a meeting between the Governments of His Majesty at home and beyond the seas.

The Prime Minister was *ex-officio* president, the Secretary of State for the Colonies acting as chairman in the former's absence.

At this conference the formation of a General Staff at the War Office was welcomed in the following terms :—

“ That this Conference welcomes and cordially approves the exposition of the general principles embodied in the statement of the Secretary of State for War, and, without wishing to commit any of the governments represented, recognises and affirms the need of developing for the service of the Empire a General Staff, selected from the forces of the Empire as a whole, which shall study military science in all its branches, shall collect and disseminate to the various governments military information and intelligence, shall undertake the preparation of schemes of defence on a common principle, and, without in the least interfering in questions connected with command and administration, shall, at the request of the respective governments, advise as to the training, education, and war organization of the military forces of the Crown in every part of the Empire.” (C.M.D. 3523.)

Before the meeting of the conference in 1911 two events of considerable importance had taken place. The General Staff had become the Imperial General Staff, and in 1909 the Naval and Military Conference had taken place.

The Conference of 1911 was marked by one occurrence of great importance. All questions of defence were discussed in secret at a meeting of the Committee of Imperial Defence at which the Foreign Secretary frankly explained the international position at that time, particularly with reference to the ill-concealed hostility of Germany.

Proposals for the establishment of an Imperial Council of State did not receive universal approval, and the suggestion was dropped. (C.M.D. 5741, 1911.)

The Conference of 1911 marked a rapid advance in the spirit of imperial co-operation. “ Without laying down any hard-and-fast rules of the game, without defining spheres of influence or limits of action, in such manner as might be convenient from time to time on friendly, family, almost informal lines, the inmost circle at home was thrown open to the responsible Ministers from the overseas peoples. Defence was recognized as involving foreign policy, and recognition by the Dominion governments that defence was a matter of common concern brought in its

train corresponding recognition by the Government of the United Kingdom that the Dominion Governments must be taken into confidence with regard to the foreign relations of the Empire.”*

No Conference was held in 1915, though on the outbreak of war all the Dominions had unhesitatingly supported the decision of Great Britain and had pledged themselves to support it.

In 1916 the Dominion Prime Ministers were summoned to London to serve on an Imperial War Cabinet and to assist in the task of harnessing the full powers of the Empire in the effective prosecution of the war. For two years this combined effort was maintained.

In 1918 the collapse of the Central Powers showed that certain discordant tendencies were present and, instead of the Empire maintaining a united front and signing the peace treaties as a single unit, the separate signatures of the Dominion Prime Ministers were appended to these documents.

The implications of this change of status had been present in the minds of all during the interval before the next Conference met in 1921, but it was then generally felt that no great constitutional experiments should be indulged in, and that the machinery whereby rapid consultation was possible and the general custom of keeping Dominion Prime Ministers *au fait* with developments was satisfactory enough and that the machinery which had weathered the storm of the war was effective enough for peace.

The discordant views of the Dominions and Great Britain regarding the renewal of the Japanese Alliance were harmonised and the way paved for the Washington Conference of 1922. In this year the Chanak incident raised in an acute form the general question of the liability of the Dominions to render military aid in circumstances about which they had not previously been consulted.

At the 1923 Conference the Irish Free State was for the first time separately represented by its Prime Minister. The following agreements were arrived at :—

(1) That any Dominion, acting under the full authority of the King, could separately negotiate and sign a treaty with a foreign Power on the understanding that no other government not directly affected should be bound by the implications of the treaty, and that any government likely to be affected by the treaty should be notified beforehand.

(2) That general support of the Empire for the League of Nations was re-affirmed.

(3) The necessity for adequate provision for the adequate defence of the territories and the trade of the several countries comprising the British Empire.

* Sir C. Lucas, “The Empire at War.” Oxford University Press.

Before the next meeting, in 1926, the Colonial Office had been divided into two separate administrative units to deal with the business of the Dominions and with that of the non-self-governing colonies. A committee was set up under the chairmanship of the late Lord Balfour to draft a statement setting out in definite terms the relationship of the Dominions. This draft states they are autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations.

Henceforth every self-governing Dominion is the master of its own fate.

APPENDIX D.

REPORT OF INTER-IMPERIAL RELATIONS COMMITTEE.

I.—STATUS OF GREAT BRITAIN AND THE DOMINIONS.

The Committee are of opinion that nothing would be gained by attempting to lay down a constitution for the British Empire. Its widely scattered parts have very different characteristics, very different histories, and are at very different stages of evolution; while, considered as a whole, it defies classification and bears no real resemblance to any other political organization which now exists or has ever yet been tried.

There is, however, one most important element in it which from a strictly constitutional point of view, has now, as regards all vital matters, reached its full development—we refer to the group of self-governing communities composed of Great Britain and the Dominions. Their position and mutual relation may be readily defined. *They are autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown, and freely associated as members of the British Commonwealth of Nations.*

A foreigner endeavouring to understand the true character of the British Empire by the aid of this formula alone would be tempted to think that it was devised rather to make mutual interference impossible than to make mutual co-operation easy.

Such a criticism, however, completely ignores the historic situation. The rapid evolution of the Oversea Dominions during the last fifty years has involved many complicated adjustments of old political machinery to changing conditions. The tendency towards equality of status was both right and inevitable. Geographical and other conditions made this impossible of attainment by the way of federation. The only alternative was by the way of autonomy; and along this road it has been steadily sought. Every self-governing member of the Empire is now the master of its destiny. In fact, if not always in form, it is subject to no compulsion whatever.

But no account, however accurate, of the negative relations in which Great Britain and the Dominions stand to each other can do more than express a portion of the truth. The British Empire is not founded upon negations. It depends essentially, if not formally, on positive ideals. Free institutions are its life-blood. Free co-operation is its instrument. Peace, security and progress are among its objects. Aspects of all these great themes have been

discussed at the present Conference ; excellent results have been thereby obtained. And, though every Dominion is now, and must always remain, the sole judge of the nature and extent of its co-operation, no common cause will, in our opinion, be thereby imperilled.

Equality of status, so far as Britain and the Dominions are concerned, is thus the root principle governing our inter-Imperial relations. But the principles of equality and similarity, appropriate to *status*, do not universally extend to function. Here we require something more than immutable dogmas. For example, to deal with questions of diplomacy and questions of defence, we require also flexible machinery—machinery which can, from time to time, be adapted to the changing circumstances of the world. This subject also has occupied our attention. The rest of this report will show how we have endeavoured not only to state political theory, but to apply it to our common needs.

II.—SPECIAL POSITION OF INDIA.

It will be noted that in the previous paragraphs we have made no mention of India. Our reason for limiting their scope to Great Britain and the Dominions is that the position of India in the Empire is already defined by the Government of India Act, 1919. We would, nevertheless, recall that by Resolution IX of the Imperial War Conference, 1917, due recognition was given to the important position held by India in the British Commonwealth. Where, in this report, we have had occasion to consider the position of India, we have made particular reference to it.

III.—RELATIONS BETWEEN THE VARIOUS PARTS OF THE BRITISH EMPIRE.

Existing administrative, legislative and judicial forms are admittedly not wholly in accord with the position as described in Section I of this report. This is inevitable, since most of these forms date back to a time well antecedent to the present stage of constitutional development. Our first task then was to examine these forms with special reference to any cases where the want of adaptation of practice to principle caused, or might be thought to cause, inconvenience in the conduct of inter-Imperial relations.

(a) *The Title of His Majesty the King.*

The title of His Majesty the King is of special importance and concern to all parts of His Majesty's Dominions. Twice within the last fifty years has the Royal title been altered to suit changed conditions and constitutional developments.

The present title, which is that proclaimed under the Royal Titles Act of 1901, is as follows :—

“ George V, by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas King, Defender of the Faith, Emperor of India.”

Some time before the Conference met, it had been recognized that this form of title hardly accorded with the altered state of affairs arising from the establishment of the Irish Free State as a Dominion. It had further been ascertained that it would be in accordance with His Majesty's wishes that any recommendation for change should be submitted to him as the result of discussion at the Conference.

We are unanimously of opinion that a slight change is desirable, and we recommend that, subject to His Majesty's approval, the necessary legislative action should be taken to secure that His Majesty's title should henceforward read :—

“ George V, by the Grace of God, of Great Britain, Ireland and the British Dominions beyond the Seas King, Defender of the Faith, Emperor of India.”

(b) *Position of Governors-General.*

We proceeded to consider whether it was desirable formally to place on record a definition of the position held by the Governor-General* as His Majesty's representative in the Dominions. That position, though now generally well recognized, undoubtedly represents a development from an earlier stage when the Governor-General was appointed solely on the advice of His Majesty's Ministers in London and acted also as their representative.

In our opinion it is an essential consequence of the equality of status existing among the members of the British Commonwealth of Nations that the Governor-General of a Dominion is the representative of the Crown, holding in all essential respects the same position in relation to the administration of public affairs in the Dominion as is held by His Majesty the King in Great Britain, and that he is not the representative or agent of His Majesty's Government in Great Britain or of any department of that Government.

It seemed to us to follow that the practice whereby the Governor-General of a Dominion is the formal official channel of communication between His Majesty's Government in Great Britain and His Governments in the Dominions might be regarded as no longer wholly in accordance with the constitutional position of the Governor-General. It was thought that the recognized official

*The Governor of Newfoundland is in the same position as the Governor-General of a Dominion.

channel of communication should be, in future, between Government and Government direct. The representatives of Great Britain readily recognized that the existing procedure might be open to criticism and accepted the proposed change in principle in relation to any of the Dominions which desired it. Details were left for settlement as soon as possible after the Conference had completed its work, but it was recognized by the Committee, as an essential feature of any change or development in the channels of communication, that a Governor-General should be supplied with copies of all documents of importance and in general should be kept as fully informed as is His Majesty the King in Great Britain of Cabinet business and public affairs.

(c) Operation of Dominion Legislation.

Our attention was also called to various points in connection with the operation of Dominion legislation, which, it was suggested, required clarification.

The particular points involved were :—

- (a) The present practice under which Acts of the Dominion Parliaments are sent each year to London, and it is intimated, through the Secretary of State for Dominion Affairs, that "His Majesty will not be advised to exercise his powers of disallowance" with regard to them.
- (b) The reservation of Dominion legislation, in certain circumstances, for the signification of His Majesty's pleasure which is signified on advice tendered by His Majesty's Government in Great Britain.
- (c) The difference between the legislative competence of the Parliament at Westminster and of the Dominion Parliaments in that Acts passed by the latter operate, as a general rule, only within the territorial area of the Dominion concerned.
- (d) The operation of legislation passed by the Parliament at Westminster in relation to the Dominion. In this connection special attention was called to such statutes as the Colonial Laws Validity Act. It was suggested that in future uniformity of legislation as between Great Britain and the Dominions could best be secured by the enactment of reciprocal statutes based upon consultation and agreement.

We gave these matters the best consideration possible in the limited time at our disposal, but came to the conclusion that the issues involved were so complex that there would be grave danger

in attempting any immediate pronouncement other than a statement of certain principles which, in our opinion, underlie the whole question of the operation of Dominion legislation. We felt that, for the rest, it would be necessary to obtain expert guidance as a preliminary to further consideration by His Majesty's Governments in Great Britain and the Dominions.

On the questions raised with regard to disallowance and reservation of Dominion legislation, it was explained by the Irish Free State representatives that they desired to elucidate the constitutional practice in relation to Canada, since it is provided by Article 2 of the Articles of Agreement for a Treaty of 1921 that "the position of the Irish Free State in relation to the Imperial Parliament and Government and otherwise shall be that of the Dominion of Canada."

On this point we propose that it should be placed on record that, apart from provisions embodied in constitutions or in specific statutes expressly providing for reservation, it is recognized that it is the right of the Government of each Dominion to advise the Crown in all matters relating to its own affairs. Consequently, it would not be in accordance with constitutional practice for advice to be tendered to His Majesty by His Majesty's Government in Great Britain in any matter appertaining to the affairs of a Dominion against the views of the Government of that Dominion.

The appropriate procedure with regard to projected legislation in one of the self-governing parts of the Empire which may affect the interests of other self-governing parts is previous consultation between His Majesty's Ministers in the several parts concerned.

On the question raised with regard to the legislative competence of members of the British Commonwealth of Nations other than Great Britain, and in particular to the desirability of those members being enabled to legislate with extra-territorial effect, we think that it should similarly be placed on record that the constitutional practice is that legislation by the Parliament at Westminster applying to a Dominion would only be passed with the consent of the Dominion concerned.

As already indicated, however, we are of opinion that there are points arising out of these considerations, and in the application of these general principles, which will require detailed examination, and we accordingly recommend that steps should be taken by Great Britain and the Dominions to set up a committee with terms of reference on the following lines:—

"To inquire into, report upon, and make recommendations concerning—

- (i) Existing statutory provisions requiring reservation of Dominion legislation for the assent of His Majesty or authorizing the disallowance of such legislation.

- (ii) (a) The present position as to the competence of Dominion Parliaments to give their legislation extra-territorial operation.
- (b) The practicability and most convenient method of giving effect to the principle that each Dominion Parliament should have power to give extra-territorial operation to its legislation in all cases where such operation is ancillary to provision for the peace, order and good government of the Dominion.
- (iii) The principles embodied in or underlying the Colonial Laws Validity Act, 1869, and the extent to which any provisions of that Act ought to be repealed, amended or modified in the light of the existing relations between the various members of the British Commonwealth of Nations as described in this report."

(d) Merchant Shipping Legislation.

Somewhat similar considerations to those set out above governed our attitude towards a similar, though a special, question raised in relation to Merchant Shipping Legislation. On this subject it was pointed out that, while uniformity of administrative practice was desirable, and indeed essential, as regards the Merchant Shipping Legislation of the various parts of the Empire, it was difficult to reconcile the application, in their present form, of certain provisions of the principal statute relating to Merchant Shipping, viz.: the Merchant Shipping Act of 1894, more particularly Clauses 735 and 736, with the constitutional status of the several members of the British Commonwealth of Nations.

In this case also we felt that, although, in the evolution of the British Empire, certain inequalities had been allowed to remain as regards various questions of maritime affairs, it was essential in dealing with these inequalities to consider the practical aspects of the matter. The difficulties in the way of introducing any immediate alterations in the Merchant Shipping Code (which dealt, amongst other matters, with the registration of British ships all over the world) were fully appreciated and it was felt to be necessary, in any review of the position, to take into account such matters of general concern as the qualifications for registry as a British ship, the status of British ships in war, the work done by His Majesty's consuls in the interest of British shipping and seamen, and the question of Naval Courts at foreign ports to deal with crimes and offences on British ships abroad.

We came finally to the conclusion that, following a precedent which had been found useful on previous occasions, the general question of Merchant Shipping Legislation had best be remitted to a special Sub-Conference, which could meet most appropriately at

the same time as the Expert Committee, to which reference is made above. We thought that this special Sub-Conference should be invited to advise on the following general lines :—

“ To consider and report on the principles which should govern, in the general interest, the practice and legislation relating to merchant shipping in the various parts of the Empire, having regard to the change in constitutional status and general relations which has occurred since existing laws were enacted.”

We took note that the representatives of India particularly desired that India, in view of the importance of her shipping interests, should be given an opportunity of being represented at the proposed Sub-Conference. We felt that the full representation of India on an equal footing with Great Britain and the Dominions would not only be welcomed, but could very properly be given, due regard being had to the special constitutional position of India as explained in Section II of this report.

(e) Appeals to the Judicial Committee of the Privy Council.

Another matter which we discussed, in which a general constitutional principle was raised, concerned the conditions governing appeals from judgments in the Dominions to the Judicial Committee of the Privy Council. From these discussions it became clear that it was no part of the policy of His Majesty's Government in Great Britain that questions affecting judicial appeals should be determined otherwise than in accordance with the wishes of the part of the Empire primarily affected. It was, however, generally recognized that, where changes in the existing system were proposed which, while primarily affecting one part, raised issues in which other parts were also concerned, such changes ought only to be carried out after consultation and discussion.

So far as the work of the Committee was concerned, this general understanding expressed all that was required. The question of some immediate change in the present conditions governing appeals from the Irish Free State was not pressed in relation to the present Conference, though it was made clear that the right was reserved to bring up the matter again at the next Imperial Conference for discussion in relation to the facts of this particular case.

IV.—RELATIONS WITH FOREIGN COUNTRIES.

From questions specially concerning the relations of the various parts of the British Empire with one another, we naturally turned to those affecting their relations with foreign countries. In the latter sphere, a beginning had been made towards making clear

those relations by the resolution of the Imperial Conference of 1923 on the subject of the negotiation, signature and ratification of treaties.* But it seemed desirable to examine the working of that resolution during the past three years and also to consider whether the principles laid down with regard to treaties could not be applied with advantage in a wider sphere.

(a) *Procedure in Relation to Treaties.*

We appointed a special sub-committee under the chairmanship of the Minister of Justice of Canada (The Hon. E. Lapointe, K.C.) to consider the question of treaty procedure.

The sub-committee, on whose report the following paragraphs are based, found that the resolution of the Conference of 1923 embodied on most points useful rules for the guidance of the governments. As they became more thoroughly understood and established, they would prove effective in practice.

*This resolution was as follows :—

“The Conference recommends for the acceptance of the governments of the Empire represented that the following procedure should be observed in the negotiation, signature and ratification of international agreements.

“The word ‘treaty’ is used in the sense of an agreement which, in accordance with the normal practice of diplomacy, would take the form of a treaty between heads of states, signed by plenipotentiaries provided with full powers issued by the heads of the states, and authorizing the holders to conclude a treaty.

I.

“1. *Negotiation.*

“(a) It is desirable that no treaty should be negotiated by any of the governments of the Empire without due consideration of its possible effect on other parts of the Empire, or, if circumstances so demand, on the Empire as a whole.

“(b) Before negotiations are opened with the intention of concluding a treaty, steps should be taken to ensure that any of the other governments of the Empire likely to be interested are informed, so that, if any such government considers that its interests would be affected, it may have an opportunity of expressing its views, or, when its interests are intimately involved, of participating in the negotiations.

“(c) In all cases where more than one of the governments of the Empire participates in the negotiations, there should be the fullest possible exchange of views between those governments before and during the negotiations. In the case of treaties negotiated at international conferences, where there is a British Empire delegation, on which, in accordance with the now established practice, the Dominions and India are separately represented, such representation should also be utilized to attain this object.

“(d) Steps should be taken to ensure that those governments of the Empire whose representatives are not participating in the negotiations should, during their progress, be kept informed in regard to any points arising in which they may be interested.

“2. *Signature.*

“(a) Bilateral treaties imposing obligations on one part of the Empire only should be signed by a representative of the government of that part. The full power issued to such representative should indicate the part of the

Some phases of treaty procedure were examined, however, in greater detail in the light of experience in order to consider to what extent the resolution of 1923 might with advantage be supplemented.

Negotiation.

It was agreed in 1923 that any of the governments of the Empire contemplating the negotiation of a treaty should give due consideration to its possible effect upon other governments and should take steps to inform governments likely to be interested of its intention.

This rule should be understood as applying to any negotiations which any government intends to conduct, so as to leave it to the other governments to say whether they are likely to be interested.

Empire in respect of which the obligations are to be undertaken, and the preamble and text of the treaty should be so worded as to make its scope clear.

"(b) Where a bilateral treaty imposes obligations on more than one part of the Empire, the treaty should be signed by one or more plenipotentiaries on behalf of all the governments concerned.

"(c) As regards treaties negotiated at international conferences, the existing practice of signature by plenipotentiaries on behalf of all the governments of the Empire represented at the Conference should be continued, and the full powers should be in the form employed at Paris and Washington.

3. Ratification.

"The existing practice in connection with the ratification of treaties should be maintained.

II.

"Apart from treaties made between heads of states, it is not unusual for agreements to be made between governments. Such agreements, which are usually of a technical or administrative character, are made in the names of the signatory governments, and signed by representatives of those governments, who do not act under full powers issued by the heads of the states: they are not ratified by the heads of the states, though in some cases some form of acceptance or confirmation by the governments concerned is employed. As regards agreements of this nature the existing practice should be continued, but before entering on negotiations the governments of the Empire should consider whether the interests of any other part of the Empire may be affected, and, if so, steps should be taken to ensure that the government of such part is informed of the proposed negotiations, in order that it may have an opportunity of expressing its views."

The resolution was submitted to the full Conference and unanimously approved. It was thought, however, that it would be of assistance to add a short explanatory statement in connection with part I (3), setting out the existing procedure in relation to the ratification of treaties. This procedure is as follows:—

- (a) The ratification of treaties imposing obligations on one part of the Empire is effected at the instance of the government of that part:
- (b) The ratification of treaties imposing obligations on more than one part of the Empire is effected after consultation between the governments of those parts of the Empire concerned. It is for each government to decide whether Parliamentary approval or legislation is required before desire for, or concurrence in, ratification is intimated by that government.

When a government has received information of the intention of any other government to conduct negotiations, it is incumbent upon it to indicate its attitude with reasonable promptitude. So long as the initiating government receives no adverse comments and so long as its policy involves no active obligations on the part of the other governments, it may proceed on the assumption that its policy is generally acceptable. It must, however, before taking any steps which might involve the other governments in any active obligations, obtain their definite assent.

Where by the nature of the treaty it is desirable that it should be ratified on behalf of all the governments of the Empire, the initiating government may assume that a government which has had full opportunity of indicating its attitude and has made no adverse comments will concur in the ratification of the treaty. In the case of a government that prefers not to concur in the ratification of a treaty unless it has been signed by a plenipotentiary authorized to act on its behalf, it will advise the appointment of a plenipotentiary so to act.

Form of Treaty.

Some treaties begin with a list of the contracting countries and not with a list of heads of states. In the case of treaties negotiated under the auspices of the League of Nations, adherence to the wording of the annex to the Covenant for the purpose of describing the contracting party has led to the use in the preamble of the term "British Empire" with an enumeration of the Dominions and India if parties to the Convention, but without any mention of Great Britain and Northern Ireland and the Colonies and Protectorates. These are only included by virtue of their being covered by the term "British Empire." This practice, while suggesting that the Dominions and India are not on a footing of equality with Great Britain as participants in the treaties in question, tends to obscurity and misunderstanding and is generally unsatisfactory.

As a means of overcoming this difficulty it is recommended that all treaties (other than agreements between governments) whether negotiated under the auspices of the League or not should be made in the name of heads of states, and, if the treaty is signed on behalf of any or all of the governments of the Empire, the treaty should be made in the name of the King as the symbol of the special relationship between the different parts of the Empire. The British units on behalf of which the treaty is signed should be grouped together in the following order:—Great Britain and Northern Ireland and all parts of the British Empire which are not separate members of the League, Canada, Australia, New Zealand, South Africa, Irish Free State, India.

In the case of a treaty applying to only one part of the Empire it should be stated to be made by the King on behalf of that part.

The making of the treaty in the name of the King as the symbol of the special relationship between the different parts of the Empire will render superfluous the inclusion of any provision that its terms must not be regarded as regulating *inter se* the rights and obligations of the various territories on behalf of which it has been signed in the name of the King. In this connection it must be borne in mind that the question was discussed at the Arms Traffic Conference in 1925, and that the Legal Committee of that Conference laid it down that the principle to which the foregoing sentence gives expression underlies all international conventions.

In the case of some international agreements the governments of different parts of the Empire may be willing to apply between themselves some of the provisions as an administrative measure. In this case they should state the extent to which and the terms on which such provisions are to apply. Where international agreements are to be applied between different parts of the Empire, the form of a treaty between heads of states should be avoided.

Full Powers.

The plenipotentiaries for the various British units should have full powers, issued in each case by the King on the advice of the government concerned, indicating and corresponding to the part of the Empire for which they are to sign. It will frequently be found convenient, particularly where there are some parts of the Empire on which it is not contemplated that active obligations will be imposed, but where the position of the British subjects belonging to these parts will be affected, for such government to advise the issue of full powers on their behalf to the plenipotentiary appointed to act on behalf of the government or governments mainly concerned. In other cases provision might be made for accession by other parts of the Empire at a later date.

Signature.

In the cases where the names of countries are appended to the signatures in a treaty, the different parts of the Empire should be designated in the same manner as is proposed in regard to the list of plenipotentiaries in the preamble to the treaty. The signatures of the plenipotentiaries of the various parts of the Empire should be grouped together in the same order as is proposed above.

The signature of a treaty on behalf of a part of the Empire should cover territories for which a mandate has been given to that part of the Empire, unless the contrary is stated at the time of the signature.

Coming into Force of Multilateral Treaties.

In general, treaties contain a ratification clause and a provision that the treaty will come into force on the deposit of a certain number of ratifications. The question has sometimes arisen in connection with treaties negotiated under the auspices of the League whether, for the purpose of making up the number of ratifications necessary to bring the treaty into force, ratifications on behalf of different parts of the Empire which are separate members of the League should be counted as separate ratifications. In order to avoid any difficulty in future, it is recommended that, when it is thought necessary that a treaty should contain a clause of this character, it should take the form of a provision that the treaty should come into force when it has been ratified on behalf of so many separate members of the League.

We think that some convenient opportunity should be taken of explaining to the other members of the League the changes which it is desired to make in the form of treaties and the reasons for which they are desired. We would also recommend that the various governments of the Empire should make it an instruction to their representatives at international conferences to be held in future that they should use their best endeavours to secure that effect is given to the recommendations contained in the foregoing paragraphs.

(b) Representation at International Conferences.

We also studied, in the light of the resolution of the Imperial Conference of 1923 to which reference has already been made, the question of the representation of the different parts of the Empire at international conferences. The conclusions which we reached may be summarized as follows :—

(1) No difficulty arises as regards representation at conferences convened by, or under the auspices of, the League of Nations. In the case of such conferences, all members of the League are invited, and if they attend are represented separately by separate delegations. Co-operation is ensured by the application of Para. I (1) (c) of the Treaty Resolution of 1923.

(2) As regards international conferences summoned by foreign governments, no rule of universal application can be laid down, since the nature of the representation must, in part, depend on the form of invitation issued by the convening government.

(a) In conferences of a technical character, it is usual and always desirable that the different parts of the Empire should (if they wish to participate) be represented separately by separate delegations, and where necessary efforts should be made to secure invitations which will render such representation possible.

- (b) Conferences of a political character called by a foreign government must be considered on the special circumstances of each individual case.

It is for each part of the Empire to decide whether its particular interests are so involved, especially having regard to the active obligations likely to be imposed by any resulting treaty, that it desires to be represented at the conference, or whether it is content to leave the negotiation in the hands of the part or parts of the Empire more directly concerned and to accept the result.

If a government desires to participate in the conclusion of a treaty, the method by which representation will be secured is a matter to be arranged with the other governments of the Empire in the light of the invitation which has been received.

Where more than one part of the Empire desires to be represented, three methods of representation are possible :—

- (i) By means of a common plenipotentiary or plenipotentiaries, the issue of full powers to whom should be on the advice of all parts of the Empire participating.
- (ii) By a single British Empire delegation composed of separate representatives of such parts of the Empire as are participating in the conference. This was the form of representation employed at the Washington Disarmament Conference of 1922.
- (iii) By separate delegations representing each part of the Empire participating in the conference. If, as a result of consultation, this third method is desired, an effort must be made to ensure that the form of invitation from the convening government will make this method of representation possible.

Certain non-technical treaties should, from their nature, be concluded in a form which will render them binding upon all parts of the Empire, and for this purpose should be ratified with the concurrence of all the governments. It is for each government to decide to what extent its concurrence in the ratification will be facilitated by its participation in the conclusion of the treaty, as, for instance, by the appointment of a common plenipotentiary. Any question as to whether the nature of the treaty is such that its ratification should be concurred in by all parts of the Empire is a matter for discussion and agreement between the Governments.

(c) *General Conduct of Foreign Policy.*

We went on to examine the possibility of applying the principles underlying the Treaty Resolution of the 1923 Conference to matters arising in the conduct of foreign affairs generally. It was frankly recognized that in this sphere, as in the sphere of defence, the major share of responsibility rests now, and must for some time

continue to rest, with His Majesty's Government in Great Britain. Nevertheless, practically all the Dominions are engaged to some extent, and some to a considerable extent, in the conduct of foreign relations, particularly those with foreign countries on their borders. A particular instance of this is the growing work in connection with the relations between Canada and the United States of America which has led to the necessity for the appointment of a Minister plenipotentiary to represent the Canadian Government in Washington. We felt that the governing consideration underlying all discussions of this problem must be that neither Great Britain nor the Dominions could be committed to the acceptance of active obligations except with the definite assent of their own governments. In the light of this governing consideration, the Committee agreed that the general principle expressed in relation to treaty negotiations in Section V (a) of this report, which is indeed already to a large extent in force, might usefully be adopted as a guide by the governments concerned in future in all negotiations affecting foreign relations falling within their respective spheres.

(d) *Issue of Exequaturs to Foreign Consuls in the Dominions.*

A question was raised with regard to the practice regarding the issue of exequaturs to consuls in the Dominions. The general practice hitherto, in the case of all appointments of Consuls de Carrière in any part of the British Empire has been that the foreign government concerned notifies His Majesty's Government in Great Britain, through the diplomatic channel, of the proposed appointment, and that, provided that it is clear that the person concerned is, in fact, a Consul de Carrière, steps have been taken, without further formality, for the issue of His Majesty's exequatur. In the case of consuls other than those *de carrière*, it has been customary for some time past to consult the Dominion government concerned before the issue of the exequatur.

The Secretary of State for Foreign Affairs informed us that His Majesty's Government in Great Britain accepted the suggestion that in future any application by a foreign government for the issue of an exequatur to any person who was to act as consul in a Dominion should be referred to the Dominion government concerned for consideration, and that, if the Dominion government agreed to the issue of the exequatur, it would be sent to them for counter-signature by a Dominion Minister. Instructions to this effect had indeed already been given.

(e) *Channel of Communication between Dominion Governments and Foreign Governments.*

We took note of a development of special interest which had occurred since the Imperial Conference last met—viz.: the appointment of a minister plenipotentiary to represent the interests of the Irish Free State in Washington, which was now about to be

followed by the appointment of a diplomatic representative of Canada. We felt that most fruitful results could be anticipated from the co-operation of His Majesty's representatives in the United States of America, already initiated, and now further to be developed. In cases other than those where Dominion Ministers were accredited to the heads of foreign states, it was agreed to be very desirable that the existing diplomatic channels should continue to be used, as between the Dominion governments and foreign governments, in matters of general and political concern.

V.—SYSTEM OF COMMUNICATION AND CONSULTATION.

Sessions of the Imperial Conference at which the Prime Ministers of Great Britain and of the Dominions are all able to be present cannot, from the nature of things, take place very frequently. The system of communication and consultation between Conferences becomes, therefore, of special importance. We reviewed the position now reached in this respect with special reference to the desirability of arranging that closer personal touch should be established between Great Britain and the Dominions, and the Dominions *inter se*. Such contact alone can convey an impression of the atmosphere in which official correspondence is conducted. Development, in this respect, seems particularly necessary in relation to matters of major importance in foreign affairs where expedition is often essential, and urgent decision necessary. A special aspect of the question of consultation which we considered was that concerning the representation of Great Britain in the Dominions. By reason of his constitutional position, as explained in Section III (b) of this report, the Governor-General is no longer the representative of His Majesty's Government in Great Britain. There is no one therefore in the Dominion capitals in a position to represent with authority the views of His Majesty's Government in Great Britain.

We summed up our conclusions in the following resolution, which is submitted for the consideration of the Conference :—

“ The governments represented at the Imperial Conference are impressed with the desirability of developing a system of personal contact, both in London and in the Dominion capitals to supplement the present system of inter-communication and the reciprocal supply of information on affairs requiring joint consideration. The matter in which any new system is to be worked out is a matter for consideration and settlement between His Majesty's Governments in Great Britain and the Dominions, with due regard to the circumstances of each particular part of the Empire, it being understood that any new arrangements should be supplementary to, and not in replacement of, the system of direct communication from government to government and the special arrangements which have been in force since 1918 for communications between Prime Ministers.”

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CHAPTER III

DEFENCE ORGANIZATION OF THE BRITISH EMPIRE

The Requirements of Defence.

TRANSLATING the general principles laid down by the 1923 Conference into concrete expression, the policy of security requires that measures of defence shall be undertaken—

- (a) To provide for the defence of Great Britain and for the other self-governing communities ;
- (b) To provide for the security of the Colonial Empire ;
- (c) To provide for the defence of the Imperial Communications by sea and air.

In addition to the provision of adequate defence in the case of external aggression against any of the above, adequate provision must be made in certain places and under certain circumstances for internal security.

The second of these needs will be considered first.

The widely differing conditions obtaining within the Empire require that large responsibilities shall be undertaken in the policing of the backward races until these accept the rule of law ; force, by whomsoever or howsoever exerted, must stand behind the law. The enforcement of law and order and the maintenance of British justice throughout the Empire is clearly a defensive operation, the continuance of which is essential if the Commonwealth and the world are to be saved from chaos and anarchy.

This duty may in some cases be permanent—*e.g.*, the case of India—or may be undertaken temporarily and relinquished when order has been restored and the civil authority enforced. Under whichever head this service may be rendered, it is clearly a contribution towards the fulfilment of the national policy.

The first need is and will remain a standing charge until a machinery is evolved whereby the nations may settle their differences by any other means than by war. Though, since the establishment of the League of Nations, considerable advances towards the peaceful settlements of international disputes have been achieved, general tendencies appear to indicate that wide political agreements are a condition precedent to any large reductions in the armaments of the Powers. Whether total disarmament ever be reached or not, the progress towards this state must be slow since it can only arrive through the united will to peace of all the nations. Total disarmament will also be

reached through successive stages, the decrease of defence forces being in the same ratio as the increase in the will to peace. While the prevention of war or its total elimination as an instrument of policy is the ultimate aim both of the Commonwealth and of the world, a present security, both internal and external, is at least essential while the many difficulties of the intervening period are being solved.

A consideration of the security against external aggression will indicate that varying degrees of security exist. In certain cases it must be absolute, in others it may be limited, this limitation being determined by the nature of the danger and the time that must elapse before reinforcements may arrive.

Whether the threat be such as to require only the despatch of a regular expeditionary force or of a national army, the possession and safety of communications are an essential since the local garrisons which may be called upon will require reserves.

Difficulties of Defence.

It will be recalled that the Empire is some twelve and a half million square miles in extent, and contains upwards of four hundred and fifty million persons, and that its lands are flung round the globe, so that even if no account be taken of this vast size and complexity of peoples, the widely scattered position of its various components constitutes a strategic problem of the first importance.

It would probably be true to say that no branch of the national activity has been more profoundly changed by the results of the mechanical revolution than have the military services.

"We are now going through a social change comparable to, and the sequel of, the industrial revolution of the middle of the nineteenth century. The outstanding feature of our age is that every day all of us are coming to rely more and more upon machinery. Our industries and indeed our personal comfort are more and more dependent upon the factory, and less and less upon the output of human labour unaided by the machine. In the military world a like process is at work. It has for a long time been applied to navies, and the modern battleship is now a mass of intricate machinery enclosed in a steel case. As a result of the experiences of the Great War armies are following the example of fleets. In that war the supply of munitions, and therefore the importance of the manufacture and the supply of material convertible into munitions, attained an importance beyond comparison greater than in former wars. Plans for battle were dependent to a predominant degree upon the number of shells and guns available. This was, of course, largely due to the fact that the existence of the trench barrier allowed ample

time for preparation. But one result of the experience gained is that, the military thought everywhere has been impressed by the fact that the unprotected rifleman, however numerous he may be, cannot produce a volume of fire at all comparable with that produced by the right type of military machine. Armies are therefore going through a process of mechanization; and whether the particular weapons with which they are now armed survive the test of war or not, it seems certain that changes will take the form of reliance upon other and better machines rather than the development of man-power, unaided by the machine. Man-power will be wanted elsewhere as well as at the front.

"Napoleon gave as his recipe for victory the big battalions. He obtained his results mainly by shock-power delivered at the right time and place. Power in modern war takes the form of fire-power, using the term to comprise every form of projectile projected from sea, land or air. To enable that form of power to be sustained, big factories will be as essential as were big battalions to Napoleon. If machines of the right kind and in the necessary numbers are to be produced quickly, and if those machines are to be provided with the immense amount of missiles which they are capable of discharging, then enormous demands will be made upon manufacture. It follows, then, that in any future war those countries which have a highly developed industrial system and control over raw materials convertible into military machines and munitions will be at a great advantage; and, further, that of those countries, the one which has given at least as much thought to the mobilization of its industries as it has to the mobilization of its armies will be at the greatest advantage. As one of the greatest manufacturing countries of the world, these developments should be all in our favour, provided always that we think of them and apply them in the right way" (Maurice, "British Strategy").

But though this increasing dependence upon machines is being forced upon the fighting services, they can have but very limited control in peace over industry, any faults of which in organization or technique may have disastrous consequences. The pre-war German monopoly in the manufacture of magnetos indicates the serious consequences that may at any time arise from failure to keep abreast of the constant changes in industry now made possible by scientific research.

It should also be noted that the general movements of commodities in peace time may not be those most desirable in times of war. Economic facts are, however, stubborn facts, and in peace time no industry can endure unless it pays its way, nor be maintained on an uneconomic basis solely because it is essential to war. This difficulty of the movement of commodities is more profound in the case of the Commonwealth which from its widely

scattered position must seek the best, and therefore often the nearest, markets for its goods. The reorganization of commodity movements entailing the improvization of financial arrangements and transportation services would be necessarily a lengthy process.

These difficulties are inherent in the economic evolution of the Commonwealth, but their effects may be far-reaching.

It may be noted here that, in view of the pre-war German control of certain Australian metal-producing companies, many British companies controlling commodities, particularly metals, the supplies of which are essential for the prosecution of war, have taken steps to ensure that control, both financial and directional, shall remain in British hands.

The rapid development of scientific knowledge and the increasing co-operation between science and industry has made man's conquest of space and time almost complete, with the consequential enlargement of the areas within which and the speed at which he can fight. Fighting has become three-dimensional.

Fighting may now take place on land, in or under the sea, and in the air, and may occur practically anywhere upon the globe. Any future war will be a combination of land, sea and air war in which any one form may predominate.

The Organization of Defence.

The setting up of a sound military organization is clearly an essential. Its duties are to frame a military policy, to see that an instrument is brought into being and is then adequately trained and equipped to carry the policy into effect on land, at sea or in the air.

The organization necessary to give effect to these requirements may be divided as follows :—

(a) A body to co-ordinate the work of the three Services and be in a position to offer considered advice to the Cabinet upon the general military position.

(b) An organization that can control the working of each of the three fighting Services in peace and war.

(c) The organization of a decentralized system of local commands.

(d) The organization of military training and education.

1. The Committee of Imperial Defence.

In accordance with the terms of a Treasury Minute of May 4th, 1904, the Committee of Imperial Defence consists of the Prime Minister, as President, with such other members as, having regard to the nature of the subject to be discussed, he may from time to time summon to assist him. In pursuance of a decision by the

Prime Minister, the Committee places on record that the following should be members :—

- The Chairman (Deputy to the Prime Minister).
- The Secretary of State for War.
- The Secretary of State for Air.
- The First Lord of the Admiralty.
- The Chancellor of the Exchequer, or the Financial Secretary.
- The Secretary of State for Foreign Affairs.
- The Secretary of State for the Colonies.
- The Secretary of State for India.
- The Chiefs of Staff of the three Fighting Services.
- The Permanent Secretary of the Treasury as head of the Civil Service.

In addition to these, other British Ministers of the Crown and other officials or persons having special qualifications will be summoned as members by the President according to the nature of the business. (Report of the Sub-Committee of the Committee of Imperial Defence, C.M.D. 2029, 1924.)

This Committee, which is purely advisory in character and possessing no executive authority which properly belongs to the Cabinet, is continuously engaged upon the study of every aspect of Imperial Defence. It possesses a permanent secretary and three assistant secretaries nominated by the Prime Minister on the recommendation of the three Cabinet Ministers respectively in charge of the three fighting Services.

The main duties of this Committee may be sufficiently adjudged by the responsibilities laid upon the Chairman acting for the Prime Minister, who is able to devote but a small part of his time and attention to defence questions.

The principal duty of the Committee is to keep the whole defence situation under review, so as to ensure that defence preparations are co-ordinated and framed to meet the needs of policy. To ensure this, the Chairman will receive the advice of the three chiefs of staff or any other experts who may assist him in order that the fullest information may be available for the Committee who consider resolutions upon such action as any situation may be deemed to require.

It will be seen that in this Committee, composed of the Prime Minister and the principal members of the Cabinet and a representative of the permanent Civil Service, and assisted by the expert advice of the chiefs of staff, every aspect of the national policy as affected by, or affecting questions of, defence receives due consideration, and the recommendations of the Committee thus embody the agreed opinion of the three military advisers of the Crown as subsequently co-ordinated by the Committee to suit the national policy.

It should be noted that while no permanent machinery exists for the representation upon the Committee of the views of the Dominions, it may be presumed that any large questions of defence arising in any dominion would be forwarded to the Committee of Imperial Defence by the Defence Committee of the Dominion concerned, as it is stated that both before and since the war the Dominions and India have been furnished with many of the reports of the Committee of Imperial Defence.

To assist the Committee of Imperial Defence, three permanent sub-committees have been established—

(a) *The Chiefs of Staff Sub-Committee*.—This sub-committee, forming a super-chief of a war staff in commission, meets for the discussion of such questions as affect their joint responsibilities and for securing an agreed and duly co-ordinated military policy acceptable to the Government and capable of accomplishment by the forces placed by Parliament at their disposal. It should be noted, also, that each chief of staff has the right to initiate discussion on any aspect of land, sea or air warfare since their responsibility is a joint and several one.

(b) *The Man-power Sub-Committee*, and

(c) *The Supply Officers Sub-Committee*, dealing with the provision of munitions and supplies in war time.

The late Lord Haldane, in giving evidence on the question of the establishment of a single Ministry of Defence, stated his opinion in favour of the Committee of Imperial Defence as follows :—

“The Committee of Imperial Defence is an organization that has nothing quite resembling it in any other Country. The reason is that no other nation resembles the British Empire, with its island centre for a number of countries, some of which are self-governing, and all of which are united by unwritten and elastic obligations. We have evolved this Committee to meet the Dominion as well as Home necessities, and to meet the former it is far better adapted than any special Ministry of Defence could be.”

It will be seen that the Committee of Imperial Defence, with its three permanent technical sub-committees, fulfils a greater function than could a single Ministry of Defence.

The authority of the Committee and its power of co-ordination is derived from the fact that its President is the Prime Minister, whose office possesses greater authority than that of any single Minister of Defence, and whose person represents a concrete co-ordination of the civil and military policy of the nation; an additional factor making for co-ordination being that the Secretary of the Committee of Imperial Defence is also the head of the Cabinet Secretariat.

The Committee of Imperial Defence is therefore in effect the Minister of Defence (in Committee), but with advisory, not executive powers.

2. The Service Councils.

Board of Admiralty—Army Council—Air Ministry.—The control of the defence services in peace and of their operation in war is centred in committees. These are called the Board of Admiralty, Army Council and Air Ministry.

At their head is a political chief, a Cabinet Minister, and often a deputy in the form of an Under-Secretary of State, who is also a member of one or other Houses of Parliament.

These two act as liaison officers, as it were, between the Cabinet and these Committees, keeping them in touch with the general policy of the Cabinet and indicating the changes that at any time may appear.

The other members of these Committees, with one exception to be noted later, are serving officers, the principal of whom is known as the Chief of Staff. He is responsible for the general working of the Department and controls in the widest sense its policy.

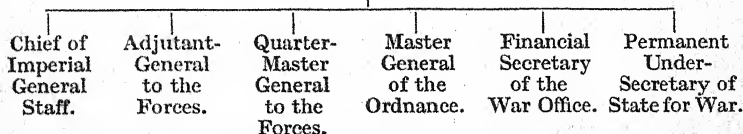
The Secretary, a permanent Civil Servant, is during his service as Secretary always a member of the Council, political chiefs as well as serving officers being liable to change. The Secretary controls and directs the internal economy of the whole department, and is often directly responsible for the conduct of those branches which deal with more or less civilian matters.

The other Service members are also in control of one of the branches of the department, the general organization of one of which is shown below :—

THE ARMY COUNCIL.

Secretary of State for War.

Parliamentary Under-Secretary of State for War.



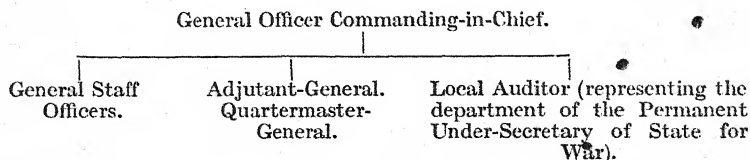
The general organization of the Board of Admiralty and of the Air Council is upon similar though not entirely identical lines.

The whole organization is co-ordinated and arranged to produce a sufficient and efficient instrument of war.

3. Organization of the Commands.

The military forces both at home and abroad are, to secure co-ordination and decentralization, organized into commands.

To indicate the co-ordination between the Army Council and the staffs of the command, the organization of the Aldershot Command is shown below :—



It will be seen that the department of the Chief of the Imperial General Staff and the services of the Adjutant-General and Quartermaster-General and of Finance have their counterpart upon the staff of the local command.

While it is for the Army Council to determine the lines of a military policy in consonance with the requirements of the nation, its interpretation expressed in the training of the forces for the duties that the national policy may require is undertaken by the local command.

The principal commands of the three Services are disposed at home and abroad :—

<i>Navy.</i>	<i>Army.</i>	<i>Royal Air Force.</i>
Atlantic.	Aldershot.	Air Defence of Great Britain.
Mediterranean.	Eastern.	Inland Area.
China.	Northern.	Coastal Area.
East Indies.	Scottish.	Middle East.
Australia.	Southern.	Iraq.
	Western.	India.
	East Indies.	

4. The Organization of Military Training and Education.

The administrative and higher executive control of the military forces is carried out by the staffs of the three Services. This control, to be efficient, must be based upon the study of the principles of war in general and their application to particular cases.

To provide this necessary staff training and for the study of the higher direction of war or the co-ordination of the three Services in war, educational establishments are as follows :—

(a) Staff colleges for Navy, Army and Air Force have been established at Greenwich, Camberley (Quetta for India) and

Andover for officers of the three Services respectively. Entrance is by examination or nomination. Each staff college is attended by officers of the other two Services and by officers of the Dominions.

(b) Naval War College. For senior officers of the Navy for the study of the higher direction of war. Officers of the other Services also attend.

(c) Imperial Defence College. For the study of the higher direction of war by officers of the three Services. The college is commanded by a senior officer of each Service in turn.

Co-ordination of the Military Efforts of the Commonwealth.

While it will have been noted that the Committee of Imperial Defence is organized primarily to deal with the military effort of Great Britain, it was the opinion of the late Lord Haldane that it was in addition best fitted to co-ordinate the military efforts of the Commonwealth and of India as a whole.

To secure such an effective co-ordination, a clearly necessary precedent condition is the securing of agreement on the general policy to be adopted by the Commonwealth.

Such consolidation of policy, due allowance being made for the differing needs of the various components of the Commonwealth, must be sought by fostering common ideals and by the development of common public opinion to secure agreement upon vital issues.

The Imperial Conference of 1926, while accepting the express recognition of a resolution passed in 1923 to the effect that it is for the Parliaments of the several parts of the Empire, upon the recommendations of their respective Governments, to decide the nature and extent of any action which should be taken by them, recorded its general agreement upon the necessity of adequate steps for Imperial Defence, and laid emphasis upon the desirability of still further co-ordination in matters of defence.

It should first be noted that, while the establishments and general training, equipment and weapons of the Commonwealth Forces are similar to those of Great Britain, the higher administration and organization is somewhat dissimilar. The Dominions have adopted a unified system of defence, the three Services being controlled by a single Minister of Defence.

Their permanent forces in relation to the non-permanent are smaller than those in this country, and they are organized primarily for local defence in direct contradistinction to those in Great Britain, which are not organized primarily for the defence of this country itself, but as a potential expeditionary force, it being assumed that the frontiers of England are the shores of an enemy.

Further steps to secure the co-ordination of the military efforts of the Commonwealth are as follows :—

(1) The attachment of officers of the three Services of the Dominions to the various Staff Colleges and to the Imperial Defence College.

(2) The attendance of Dominions representatives at meetings of the Committee of Imperial Defence when questions of military, naval and air defence affecting the Dominions are under consideration.

(3) The establishment of a defence committee in each Dominion. While this has been accepted in principle, it has up to the present been carried into effect only in Australia and Canada.

(4) The attachment of Dominion officers to British units, particularly at the beginning of their professional career.

One further and extremely important aspect of co-ordination remains. It is almost certain that any future war will be a combined effort by the three Services, or at any rate a united effort by Army and Air Force or by Navy and Air Force. In any of these cases complete success can follow only if the principles of war of the three Services or two Services working in co-operation are harmonized. The correct co-ordination of principles will result in the correct and effective co-operation of the Services in war.

Finally, in the event of a war in which it would be necessary to employ the entire military forces of the Empire, necessary plans must be prepared to secure unity of command, and for the mobilization of all the resources, political, military, financial and industrial, available within the Commonwealth.

APPENDIX A.

DEFENCE.

The Conference gave special consideration to the question of defence, and the manner in which co-operation and mutual assistance could best be effected after taking into account the political and geographical conditions of the various parts of the Empire.

The Lord President of the Council, as chairman of the Committee of Imperial Defence, opened this part of the work of the Conference by a statement outlining the main problems of defence as they exist to-day. He was followed by the First Lord of the Admiralty, the Secretary of State for War and the Secretary of State for Air, each of whom explained to the Conference the aspects of defence which concerned his special responsibilities.

In addition to these statements, there was a full and frank interchange of views in which the standpoints of the various representatives and the circumstances of their countries were made clear. There were also discussions at the Admiralty and the Air Ministry at which naval and air defence were dealt with in greater detail. The points involved were explained by the chiefs of the Naval and Air Staffs respectively and were further examined.

In connection with naval defence one matter of immediate interest came before the Conference—namely, the projected Empire cruise of a squadron of modern warships. The First Lord of the Admiralty explained that the project was that two capital ships, the *Hood* and the *Repulse*, together with a small squadron of modern light cruisers, should visit South Africa, Singapore, Australia and New Zealand, and return by way of British Columbia, the Panama Canal and Eastern Canada. The light cruisers would accompany the battle cruisers as far as British Columbia, but would return to England by way of the west coast of South America and Cape Horn. The Dominion Prime Ministers expressed their appreciation of this proposal, and assured the Conference that the ships would be most heartily welcomed in their countries.

After the whole field of defence had been surveyed, the Conference decided that it would be advisable to record in the following resolutions its conclusions on the chief matters which had been discussed :—

- (1) The Conference affirms that it is necessary to provide for the adequate defence of the territories and trade of the several countries comprising the British Empire.

- (2) In this connection the Conference expressly recognizes that it is for the parliaments of the several parts of the Empire, upon the recommendations of their respective governments, to decide the nature and extent of any action which should be taken by them.
- (3) Subject to this provision, the Conference suggests the following as guiding principles :—
- (a) The primary responsibility of each portion of the Empire represented at the Conference for its own local defence.
 - (b) Adequate provision for safeguarding the maritime communications of the several parts of the Empire and the routes and waterways along and through which their armed forces and trade pass.
 - (c) The provision of naval bases and facilities for repair and fuel so as to ensure the mobility of the fleets.
 - (d) The desirability of the maintenance of a minimum standard of naval strength—namely, equality with the naval strength of any foreign Power, in accordance with the provisions of the Washington Treaty on Limitation of Armaments as approved by Great Britain, all the self-governing Dominions and India.
 - (e) The desirability of the development of the air forces in the several countries of the Empire upon such lines as will make it possible, by means of the adoption, as far as practicable, of a common system of organization and training and the use of uniform manuals, patterns of arms, equipment and stores (with the exception of the type of aircraft), for each part of the Empire as it may determine to co-operate with other parts with the least possible delay and the greatest efficiency.
- (4) In the application of these principles to the several parts of the Empire concerned the Conference takes note of :—
- (a) The deep interest of the Commonwealth of Australia, the Dominion of New Zealand, and India, in the provision of a naval base at Singapore, as essential for ensuring the mobility necessary to provide for the security of the territories and trade of the Empire in Eastern waters.
 - (b) The necessity for the maintenance of safe passage along the great route to the East through the Mediterranean and the Red Sea.

- (c) The necessity for the maintenance by Great Britain of a Home Defence Air Force of sufficient strength to give adequate protection against air attack by the strongest air force within striking distance of her shores.
- (5) The Conference, while deeply concerned for the paramount importance of providing for the safety and integrity of all parts of the Empire, earnestly desires, so far as is consistent with this consideration, the further limitation of armaments, and trusts that no opportunity may be lost to promote this object.

• (C.M.D. 1987, 1923.)

APPENDIX B.

DEFENCE.

The Conference gave much consideration to the question of defence, and to the methods by which the defence arrangements of each part of the Empire could be most effectively co-ordinated.

The Prime Minister of Great Britain initiated the discussions on October 26th by a review of the work and organization of the Committee of Imperial Defence, in the course of which he emphasized the purely advisory and consultative character of this body. He also outlined the chief developments which had taken place since the last Conference, notably the creation of the Chiefs of Staff Sub-Committee and the decision to establish an Imperial Defence College.

After a reference to the progress already made and to the further steps to be taken in the development of the naval base at Singapore, Mr. Baldwin mentioned that the pursuance of this policy had been greatly facilitated by the contributions of the Federated Malay States, Hong-Kong, and the Straits Settlements.

Mr. Baldwin was followed by the senior officer of the Chiefs of Staff Sub-Committee (Admiral of the Fleet Earl Beatty) in a survey of the general strategic situation, and by the Secretary of State for India in a summary of the special problems of Indian defence.

The discussions were renewed on November 15th, when statements were made by the Prime Ministers of Canada, the Commonwealth of Australia, New Zealand, and Newfoundland, by Mr. Havenga for the Union of South Africa, by Mr. O'Higgins for the Irish Free State, and by the Maharaja of Burdwan for India.*

Meetings also took place at the Admiralty, the War Office, and the Air Ministry, at which the situation from the standpoint of His Majesty's Government in Great Britain was presented in greater detail, and other phases of common interest were considered at a meeting held at the offices of the Committee of Imperial Defence.

Much interest attached to the opportunities afforded for observation of the various arms of the Service in operation, notably the naval review off Portland, the army mechanical display at Camberley, and the air demonstrations at Croydon and Cardington. Apart from their interest from the point of view of defence, these displays revealed technical developments in mechanical traction and in aviation which may prove of importance in their application for civilian purposes.

* Extracts from the speeches made on October 26th and November 15th will be found in Appendix IV in C.M.D. 2769.

The information thus obtained and the opinions exchanged will, it is believed, prove of much practical value in aiding the several governments of the Empire in the determination of their policies of defence, and are commended to their most careful consideration.

The conclusions reached by the Imperial Conference on the subject of defence may be summarized as follows :—

1. The resolutions on defence adopted at the last session of the Conference are re-affirmed.

2. The Imperial Conference regrets that it has not been possible to make greater progress with the international reduction and limitation of armaments referred to in these resolutions. It is the common desire of the governments represented at this Conference to do their utmost in pursuit of this object so far as this is consistent with the safety and integrity of all parts of the Empire and its communications.

3. The Conference recognizes that, even after a large measure of reduction and limitation of armaments has been achieved, a considerable effort will be involved in order to maintain the minimum standard of naval strength contemplated in the Washington Treaty on Limitation of Armament—namely, equality with the naval strength of any foreign Power. It has noted the statements set forth by the Admiralty as to the formidable expenditure required within coming years for the replacement of warships, as they become obsolete, by up-to-date ships.

4. Impressed with the vital importance of ensuring the security of the world-wide trade routes upon which the safety and welfare of all parts of the Empire depend, the representatives of Australia, New Zealand, and India note with special interest the steps already taken by His Majesty's Government in Great Britain to develop the naval base at Singapore, with the object of facilitating the free movement of the Fleets. In view of the heavy expenditure involved, they welcome the spirit of co-operation shown in the contributions made with the object of expediting this work.

5. The Conference observes that steady progress has been made in the direction of organizing military formation in general on similar lines ; in the adoption of similar patterns of weapons ; and in the interchange of officers between different parts of the Empire. It invites the governments concerned to consider the possibility of extending these forms of co-operation and of promoting further consultation between the respective general staffs on defence questions adjudged of common interest.

6. (a) The Conference takes note with satisfaction of the substantial progress that has been made since 1923 in building up the air forces and resources of the several parts of the Empire.

(b) Recognizing that the fullest mobility is essential to the effective and economical employment of air power, the Conference recommends, for the consideration of the several governments, the adoption of the following principle :—

The necessity for creating and maintaining an adequate chain of air bases and refuelling stations.

(c) Impressed with the desirability of still closer co-ordination in this as in all other spheres of common interest, and in particular with the advantages which should follow from a more general dissemination of the experience acquired in the use of this new arm—under the widely varying conditions which obtain in different parts of the Empire, the Conference recommends for consideration by the governments interested the adoption in principle of a system of mutual interchange of individual officers for liaison and other duties, and of complete air units, so far as local requirements and resources permit.

7. The Conference recognizes that the defence of India already throws upon the Government of India responsibilities of a specially onerous character, and takes note of their decision to create a Royal Indian Navy.

8. The Conference notes with satisfaction that considerable progress in the direction of closer co-operation in defence matters has been effected by the reciprocal attachment of naval, military and air officers to the staff colleges and other technical establishments maintained in various parts of the Empire, and invites the attention of the governments represented to the facilities afforded by the new Imperial Defence College in London for the education of officers in the broadest aspects of strategy.

9. The Conference takes note of the developments in the organization of the Committee of Imperial Defence since the session of 1923. It invites the attention of the governments represented at the Conference to the following resolutions adopted, with a view to consultation in questions of common defence, at a meeting of the Committee of Imperial Defence held on May 30th, 1911, in connection with the Imperial Conference of that year :—

- (1) That one or more representatives appointed by the respective governments of the Dominions should be invited to attend meetings of the Committee of Imperial Defence when questions of naval and military* defence affecting the Oversea Dominions are under consideration.
- (2) The proposal that a Defence Committee should be established in each Dominion is accepted in principle. The constitution of these Defence Committees is a matter for each Dominion to decide. (C.M.D. 2768, 1926.)

* The words "and air" would be required to bring the Resolution up to date.

APPENDIX C.

CO-ORDINATION.

A MINISTRY OF DEFENCE.

Since the war the most widely-discussed proposal for overcoming our defects in co-ordination is a Ministry of Defence, which has been put forward repeatedly both in Parliament and in the Press. In 1922, Sir Eric Geddes' Committee on National Expenditure recommended "the creation of a co-ordinating authority or a Ministry of Defence responsible for seeing that each force plays its part and is allotted appropriate responsibility for carrying out various functions." A Cabinet committee, which reviewed the Geddes Report, endorsed the above recommendation, but, while admitting the creation of a Ministry of Defence may be the ultimate solution of the problem, did "not consider that the present time is appropriate for the fusion of the administration of the three Services under one Minister." They recommended instead "that the Committee of Imperial Defence should be in constant session all the year round in order to consider and advise on matters of policy affecting the three fighting Services." On March 21st, 1922, the late Secretary of State for the Colonies (Mr. Churchill), during a debate in the House of Commons, made an important speech in favour of a Ministry of Defence as the ultimate solution of our problems of co-ordination, though he admitted that the time for accomplishing this had not arrived. The gist is contained in the final passages:—

"No solution of a harmonious or symmetrical character will be achieved in the co-ordination of the Services except through the agency of a Ministry of Defence, but it is not possible to create such a body at the present time, nor will it be possible for a considerable time. In the interim, the only steps which are open to us are to create machinery for pooling the administrative functions of the three arms and to create a common staff brain, from whose exertions in the future the responsible advice given to the Cabinet of the day in regard to matters of defence must and can only effectively originate."

The interim steps referred to by Mr. Churchill were the appointment of a committee, under Sir Alfred Mond (whose place was later taken by Lord Weir), to consider the amalgamation of the common Services of the Navy, Army and Air Force, and, later, of a sub-committee of the Committee of Imperial Defence under the Minister of Education, on the question of establishing a joint Staff College for the three Services. Lord Weir's committee

reported that "the amalgamation of the common Services would only be practicable if it formed part of a comprehensive scheme of reorganization which provided for the establishment of a Ministry to control a defence force in which the identity of the Navy, Army and Air Force had been merged." They recommended, however, a complete scheme for co-ordinating the common Services, which has since been adopted by the Cabinet and is being put into operation. The report of Mr. Wood's committee, proposing a scheme for the formation of a joint Staff College, has been circulated to this committee and is now before the Committee of Imperial Defence.

In view of the uncertainty as to what is meant by the term "Ministry of Defence," the Committee thought it desirable to approach some of those who have advocated this solution of the problem of co-ordination, as well as other outside authorities, in order to ascertain their views on the subject. Among the outside experts who were good enough to give the Committee the benefit of their experience on this subject there were only two advocates of a Ministry of Defence, and each of them contemplated its formation by different methods. Sir Eric Geddes proposed to achieve co-ordination of the Services by the creation of a single Secretary of State for "Warfare" or "Defence," with responsibility for the three Services. Under the Secretary of State he would put the Admiralty, War Office and Air Ministry, each of which would be under a sub-minister. These sub-ministers should not be eligible for Cabinet rank, as that would make for departmental competition between them. Among themselves they would be equal in importance and would bear the same relation to the Secretary of State as a Parliamentary Under-Secretary holds to his Ministerial chief to-day. The sub-ministers would preside respectively at the Board of Admiralty, Army Council and Air Council, which would remain more or less as at present. The Secretary of State would have a very small office, containing a statistical accountant and a council consisting of the sub-ministers of the Navy, Army and Air Force, with two members each from the Board of Admiralty, Army Council and Air Council. The Secretary of State would have to obtain the endorsement of the Committee of Imperial Defence "before his estimates and his provisions were taken to the Cabinet." Sir Eric Geddes added proposals for organization after the outbreak of war, which it is unnecessary to enter into here.

Major-General Sir Frederick Sykes advocated a Ministry of Defence by means of a form of fusion or amalgamation of the existing Service departments. He considered that "the real solution lies in definite, unified, supreme control by a Defence Ministry, with the Prime Minister as independent chairman, and a joint staff which would really think out defence as a whole."

Failing this policy of perfection, General Sykes would "support every measure which will pave the way for such control." He would achieve this by "the real strengthening of the mandate and constitution of the Committee of Imperial Defence. In his view, the Committee should frame estimates for defence for the three Services, and a special section should be formed for the specific purpose of jointly framing and supervising major schemes and measures of defence. As many services as possible should be unified. The personnel of the regular arms should be trained from boyhood. There should be a joint boy-mechanic training, a joint Cadet College, a joint staff course, etc. The question of the amalgamation of similar services should be reopened."

The proposals of the remaining outside authorities had many points in common. They all laid stress on the need for co-ordination. They all proposed that this co-ordination should be effected through the Committee of Imperial Defence. They nearly all admitted, either directly or by implication, that the work of directing the Committee was too heavy for the Prime Minister to undertake single-handed and that he should have the assistance of a minister, as vice-chairman, who could give most of his time to this task. Several laid stress on the importance of securing the co-operation of the Dominions in the Committee of Imperial Defence.

In detail, the proposals varied considerably. Lord Midleton and Lord Haldane did not indicate any particular developments of the existing Committee of Imperial Defence, the case for which was summed up by the latter in the following terms:—

"The Committee of Imperial Defence is an organization that has nothing quite resembling it in any other country. The reason is that no other nation resembles the British Empire, with its island centre for a number of countries, some of which are self-governing, and all of which are united by unwritten and elastic obligations. We have evolved this Committee to meet Dominion as well as Home necessities, and to meet the former it is far better adapted than any special Ministry of Defence would be. . . . But a still more distinctive feature of the existing organization is that it has been evolved to meet a situation where sea-power comes first, and where the other two Services are, in some measure, merely its adjuncts, however great and important. That is why the scope of the Committee must be sufficiently catholic to admit of the co-operation within it of distinguished experts at the head of very different Services."

The above extract was specifically endorsed by the Chief of the Imperial General Staff.

Major-General Seely, Field-Marshal Sir William Robertson, Major-General Sir J. H. Davidson, M.P., and Lieut.-General Sir Aylmer Hunter-Weston, M.P., all advocated definite extensions of the Committee of Imperial Defence organization, which resembled one another in principle while differing in detail.

General Seely's principal proposal was "that a minister must be appointed, under whatever title be deemed expedient, whose sole duty it will be to secure the co-operation of the three Services, reporting fully to the Prime Minister and the Cabinet. I suggest that he should be styled 'Minister of Defence and Vice-President of the Committee of Imperial Defence.'" General Seely strongly advocated the retention of the civilian heads of the three Service departments in their existing status as members of the Cabinet. "Great Government offices," he writes, "cannot possibly be controlled efficiently by any man without Cabinet rank. I am sure that anyone who has had experience of great Government offices would agree with this view."

Field-Marshal Sir William Robertson's proposals are summarized in his memorandum as follows :—

- "(a) Neither a Ministry of Defence nor a combined Imperial General Staff will provide, or help to provide, the co-ordinating authority we require.
- "(b) Controlling authority, in its true meaning, must be vested in the supreme executive power, the Cabinet, and it cannot be placed elsewhere.
- "(c) Experience has shown that we cannot conduct a great war through the medium of a Cabinet of twenty or more Ministers, and that the duty is best assigned to a small body of Ministers having no other duties to perform. As this organization is not feasible in peace time, its place should be taken by a Council of Imperial Defence, which will form a nucleus for war.
- "(d) In order to furnish this Council with the professional assistance needed, there should be, working under it, a technical committee, charged with the investigation of all operative and administrative questions, and with presenting them, with recommendations thereon, to the Council for consideration and approval.
- "(e) In time of war a Minister of Supply and a Minister of Man-power should be appointed and a War Cabinet should be formed. The latter, assisted and advised by the three Chiefs of Staff, would take over the duties in (c) and (d).
- "(f) Every effort should be made to enlist the co-operation of the Dominions, both as to State policy and war preparations."

The following details of Sir William Robertson's plan may be added. The Committee would be composed very much as heretofore. In addition :—

“The Prime Minister would, of course, be President. It would be the duty of the three Chiefs of Staff to advise the Council on professional matters, the advice to be taken or left as Ministers may think best, but to be heard. These officers should, as was the War Cabinet system, attend the Council in an advisory capacity and not as members. I believe this procedure to be the best for both parties. Following the pre-war constitution of the Committee of Imperial Defence, a senior officer from each of the three Services should be included in the Council as members. Their experience would enable them to give valuable help both to Ministers and the Chiefs of Staff, and they would be specially useful to the former in cases where the latter might feel compelled to differ from each other in regard to professional matters upon which they were called upon to advise. If these three officers (unemployed) are not included in the Council, Ministers will have to decide for themselves professional questions about which their knowledge must necessarily be imperfect, and the soundness of their decisions will, therefore, remain largely a matter of chance.”

Major-General Sir J. H. Davidson, M.P., referred the Committee to an article published by him in the *Army Quarterly* of January, 1921, in which he advocated a plan presented to the Government by the Parliamentary Army Committee in June, 1920, the essentials of which are contained in the following extract from a minute addressed by the Committee to the Prime Minister (Mr. Lloyd George) :—

“4. It is possible that the most practicable scheme under present conditions would be to create immediately a Standing Joint Defence Sub-Committee of the Committee of Imperial Defence, formed of the First Sea Lord, the C.I.G.S., and the C.A.S., or officers appointed or deputed by them, together with representatives of the self-governing Dominions, of India and of other departments concerned.

“5. Whatever be the advisory body formed, the members of the Army Committee in the House of Commons are of opinion that it is essential :—

“(i) That it should meet regularly and frequently.

“(ii) That it should have a specially selected and permanent secretariat to assist in its work, and to record its proceedings and conclusions.

“(iii) That the chairman of this Sub-Committee should be a Minister not in charge of one of the great Departments of State, except on those occasions when the Prime Minister is himself present.

“6. Among the duties of the Standing Joint Defence Sub-Committee of the Committee of Imperial Defence should be included the following :—

“To examine—

“(a) The Imperial Organization for Defence.

“(b) The Estimates, in draft, with a view to ensuring due economy and efficiency.

“(c) Our Imperial responsibilities from the point of view of Defence.

“(d) The effect of scientific progress and inventions.

“(e) The problems of strategy and logistics.

“(f) The proposals of the League of Nations.”

Lieut.-General Sir Aylmer Hunter-Weston, M.P., was a signatory of the minute of the Parliamentary Army Committee referred to above, and his memorandum gives a carefully thought-out scheme for applying the principles propounded therein. He recommended the retention of the present Committee of Imperial Defence with the title of Council of Imperial Defence, under the chairmanship of the Prime Minister, with the Lord President of the Council as vice-chairman. In addition, he proposed the establishment of a Board of Defence, composed of the Ministerial and professional heads of the three fighting Services, with a representative of the Treasury, meeting under the chairmanship of the Vice-Chairman of the Council of Defence, who might with advantage be called Minister of Defence. The chairman should have power of initiative in all matters of strategy, policy and finance affecting more than one Service. The duties proposed for this “Board of Defence” under its chairman are similar in character to those suggested by the Parliamentary Army Committee for the Standing Joint Defence Sub-Committee, but worked out in greater detail.

An essential part of General Hunter-Weston's plan was that the Council of Imperial Defence should function actively and regularly, and that the Dominions and India should be represented at its meetings. He advocated that, as no one man can fulfil the functions of Chief of the General War Staff of our Defence Forces, the office should be put in commission and carried out by the professional heads of the three Services sitting together in committee.

In the view of the Committee the proposals for a Minister of Defence are effectually disposed of in the following passage from Lord Haldane's memorandum :—

"In the way of the institution of a general Minister of Defence there are obvious difficulties. If established with anything like adequate power of control, such a Minister would be bound to interfere in administration, just as the First Lord of the Admiralty and the Secretary of State for War are bound to be ready to do so, by reason of their direct responsibility for it to Parliament. The Minister of Defence would, indeed, be looked to as responsible not only for efficiency, but for economy. He would therefore require a considerable and varied staff, whose duties would overlap and duplicate those of existing departmental staffs. What would be the relation of this new staff to the staffs under the three Ministers at present responsible to Parliament, and what would be the constitutional and practical relationship of the new Minister of Defence to the three older Ministers? The former would, I think, be in considerable danger of proving himself to be either too great or too little. He would be too little if the departmental staffs developed to their full inherent capacity and were working out general military policy in conference. In such a case the Prime Minister would be the only person possessed of authority sufficient to enable him to intervene effectively.

"With the Cabinet behind him, he is in a position to exercise influence as a Minister of Defence could.

"If, indeed, the Minister of Defence were to make himself, on the other hand, very powerful by equipping himself with an effective administrative organization sufficient for direct control of the three Services, he might well become a rival of the Prime Minister himself. The difficulty does not exhaust itself here. The first government that made such an appointment would probably make it with great care and with sufficient regard to necessary qualifications in the occupant of the position. But if a subsequent government came in that were not deeply interested in defence, the temptation would be strong to give the office to an influential politician distinguished, perhaps, mainly for debating gifts."

To these objections may be added the following, urged by Lord Midleton :—

"It is surely beyond human power for one man to get his mind impregnated with the pros and cons of large changes in three totally distinct Services within the limited time for which Parliamentary chiefs hold office. The fact that there have been eleven changes in the office of Secretary of State for War in the last eleven years has been very prejudicial to the economy and possibly to the efficiency of the Army. First Lords of the Admiralty attach the greatest importance

to their official tours for elucidating by contact with naval officers not employed at the Admiralty the problems submitted to them. The overworked Minister of Defence would be quite unable to find time for such excursions.

"A further difficulty would be the Parliamentary one, since it is often necessary for the Minister in charge to give a pledge during a debate as to the course which his department will take. Not infrequently it has happened that by far the most efficient Head of the Defence Committee would be a member of the House of Lords; . . . If the supreme executive responsibility of all three departments were to be massed in one Minister it would be imperative that he should sit in the House of Commons, and attendance in the House of Commons would add immeasurably to the already multifarious duties imposed on him."

The closely-connected question of a combined staff is disposed of equally effectively by Field-Marshal Sir William Robertson in the following terms:—

"The formation of a combined Imperial General Staff, consisting of Military, Naval and Air Force officers, working under a chief (a soldier, or sailor, or airman) responsible to the Government, or to a Minister of Defence, for working out plans of operations on land, on sea, and in the air, and, according to some, endowed with 'financial and strategical powers,' is even more fantastical as well as dreadfully mischievous. An important corner-stone in military organization is that he who makes a plan ought to be responsible for its execution and stake his reputation upon it. Consequently, the Chief of this proposed combined Staff must draft and issue the orders of the Government to all the generals and admirals and air officers entrusted with the control of the armies, the fleets and the air forces. The confusion that would arise in the three war departments and at the front, if any such ill-considered system as this were adopted, is quite inconceivable. Further, this staff would directly interpose between the three Chiefs of Staff and the Cabinet, and there could be no more pernicious system than that."

The Committee considered these criticisms to be overwhelming as against all proposals for setting up a Ministry of Defence or any Minister of Defence with authority over-riding that of the Ministers at the head of the Service departments, or a combined staff. After careful consideration of the various proposals laid before them, after a full discussion with the Chiefs of Staff of the three fighting Services, and after a close examination of the constitution and the present methods of work of the Committee of Imperial Defence, the Committee reached the following conclusions, which were

adopted by the Government and presented to Parliament in August last (1930). (C.M.D. 1938) :—

“(1) It is undesirable and impracticable to supersede the Ministerial heads of the three fighting Services by making them subordinates of a Minister of Defence ; the alternative plan for an amalgamation of the three Service departments is equally impracticable.

“(2) On the other hand, the existing system of co-ordination by the Committee of Imperial Defence is not sufficient to secure full initiative and responsibility for defence as a whole and requires to be defined and strengthened.

“(3) Under the existing system the Committee of Imperial Defence, an advisory and consultative body, inquires into and makes recommendations in regard to the issues of defence policy and organization which are brought before it. The power of initiative lies with the Government departments and with the Prime Minister.

“(4) This system, though invaluable up to a point, does not make any authority, except the Prime Minister, who can only devote a small part of his time and attention to defence questions, directly responsible for the initiation of a consistent line of policy directing the common action of the three or any two of the three Services, taking account of the reactions of the three Services upon one another.

“(5) While, therefore, the existing system of departmental initiative will continue, the responsibility for the wider initiative referred to above in paragraph (4) will also rest with the Chairman of the Committee of Imperial Defence acting under the general direction of the Committee of Imperial Defence and with the assistance of the three Chiefs of Staff.

“(6) In accordance with the terms of the Treasury minute of May 4th, 1904, constituting the Committee of Imperial Defence in its present form, the Committee of Imperial Defence will continue to consist of the Prime Minister, as President, with such other members as, having regard to the nature of the subject to be discussed, he may from time to time summon to assist him. In pursuance of a decision by the Prime Minister, the Committee places on record that the following should be members :—

“The Chairman (Deputy to the Prime Minister).

“The Secretary of State for War.

“The Secretary of State for Air.

“The First Lord of the Admiralty.

“ The Chancellor of the Exchequer, or the Financial Secretary.

“ The Secretary of State for Foreign Affairs.

“ The Secretary of State for the Colonies.

“ The Secretary of State for India.

“ The Chiefs of Staff of the three Fighting Services.

“ The Permanent Secretary to the Treasury as head of the Civil Service.

“ In addition to these, other British or Dominion Ministers of the Crown and other officials, or persons having special qualifications, will be summoned as members by the President according to the nature of the business.

“ (7) The functions of the Chairman of the Committee of Imperial Defence will be :—

“ (i) To preside over the Committee of Imperial Defence in the absence of the Prime Minister.

“ (ii) To report to the Prime Minister (when he himself has not presided) and to the Cabinet the recommendations of the Committee of Imperial Defence.

“ (iii) In matters of detail, to interpret the decisions of the Prime Minister and the Cabinet thereupon to the departments concerned.

“ (iv) Assisted by the three Chiefs of Staff, as laid down in paragraph (5) above, to keep the defence situation as a whole constantly under review so as to ensure that defence preparations and plans and the expenditure thereupon are co-ordinated and framed to meet policy, that full information as to the changing naval, military and air situation may always be available to the Committee of Imperial Defence, and that resolutions as to the requisite action thereupon may be submitted for its consideration.

“ (8) In addition to the functions of the Chiefs of Staff as advisers on questions of sea, land or air policy respectively, to their own Board or Council, each of the three Chiefs of Staff will have an individual and collective responsibility for advising on defence policy as a whole, the three constituting, as it were, a Super-Chief of a War Staff in Commission. In carrying out this function they will meet together for the discussion of questions which affect their joint responsibilities.

“ (9) Questions relating to co-ordination of expenditure may be entertained by the Committee of Imperial Defence

when referred to it by the Cabinet. The Committee (subject to any directions by the Cabinet) will consider such questions in the light of the general defence policy of the Government, and of the strategical plans drawn up to give effect to that policy in time of war.

“(10) The Secretariat of the Committee of Imperial Defence will continue to act as liaison officers between the Chairman of the Committee and the Service departments. The staff of the Committee will be strengthened by the addition of an Assistant Secretary to be nominated by the Prime Minister on the recommendation of the Secretary of State for Air, whose status will be identical with that of the three existing Assistant Secretaries nominated by the Prime Minister on the recommendation of the Secretary of State for War, the Secretary of State for India, and the First Lord of the Admiralty.

“(11) The Standing Defence Sub-Committee is suppressed, and its past proceedings will be merged into those of the Committee of Imperial Defence.”

The above recommendations are now in operation.

THE REPRESENTATION OF THE DOMINIONS AND INDIA.

There is one point in the above conclusions on which the Committee, in this their final report, would like to add a few observations, namely, regarding the provision in conclusion (6) for the extension of invitations to representatives of the Dominions to attend as members of the Committee. From the earliest days of the Committee of Imperial Defence, representatives of the Dominions have from time to time been invited to take part in its proceedings, and the Secretary of State for India has for many years attended its meetings.

The subject of Dominion representation was discussed at the Committee in May, 1911, when all the Dominions were represented and the following resolution was passed :—

“That one or more representatives appointed by the respective governments of the Dominions should be invited to attend meetings of the Committee of Imperial Defence when questions of naval and military defence affecting the Overseas Dominions are under discussion.”

(C.M.D. 2029, 1924.)

APPENDIX D.

THE CO-ORDINATION OF THE DEFENCE FORCES.

The following decisions have been taken by His Majesty's Government on the recommendations of the National and Imperial Defence Committee :—

- (1) It is undesirable and impracticable to supersede the Ministerial heads of the three fighting Services by making them subordinates of a Minister of Defence ; the alternative plan for an amalgamation of the three Service departments is equally impracticable.
- (2) On the other hand, the existing system of co-ordination by the Committee of Imperial Defence is not sufficient to secure full initiative and responsibility for defence as a whole and requires to be defined and strengthened.
- (3) Under the existing system the Committee of Imperial Defence, an advisory and consultative body, inquires into and makes recommendations in regard to the issues of defence policy and organization which are brought before it. The power of initiative lies with the Government departments and with the Prime Minister.
- (4) This system, though invaluable up to a point, does not make any authority, except the Prime Minister, who can only devote a small part of his time and attention to defence questions, directly responsible for the initiation of a constant line of policy directing the common action of the three or any two of the three Services, taking account of the reactions of the three Services upon one another.
- (5) While, therefore, the existing system of departmental initiative will continue the responsibility for the wider initiative referred to above in paragraph (4) will also rest with the Chairman of the Committee of Imperial Defence acting under the general direction of the Committee of Imperial Defence and with the assistance of the three Chiefs of Staff.
- (6) In accordance with the terms of the Treasury minute of May 4th, 1904, constituting the Committee of Imperial Defence in its present form, the Committee of Imperial Defence will continue to consist of the Prime Minister, as President, with such other members as, having

regard to the nature of the subject to be discussed, he may from time to time summon to assist him. In pursuance of a decision by the Prime Minister, the Committee places on record that the following should be members :—

- The Chairman (Deputy to the Prime Minister).
- The Secretary of State for War.
- The Secretary of State for Air.
- The First Lord of the Admiralty.
- The Chancellor of the Exchequer, or the Financial Secretary.
- The Secretary of State for Foreign Affairs.
- The Secretary of State for the Colonies.
- The Secretary of State for India.
- The Chiefs of Staff of the three Fighting Services.
- The Permanent Secretary of the Treasury as head of the Civil Service.

In addition to these, other British or Dominion Ministers of the Crown and other officials, or persons having special qualifications, will be summoned as members by the President according to the nature of the business.

- (7) The functions of the Chairman of the Committee of Imperial Defence will be :—
- (i) To preside over the Committee of Imperial Defence in the absence of the Prime Minister.
 - (ii) To report to the Prime Minister (when he himself has not presided) and to the Cabinet the recommendations of the Committee of Imperial Defence.
 - (iii) In matters of detail, to interpret the decisions of the Prime Minister and the Cabinet thereupon to the departments concerned.
 - (iv) Assisted by the three Chiefs of Staff, as laid down in paragraph (5) above, to keep the defence situation as a whole constantly under review so as to ensure that defence preparations and plans and the expenditure thereupon, are co-ordinated and framed to meet policy, that full information as to the changing naval, military and air situation may always be available to the Committee of Imperial Defence and that resolutions as to the requisite action thereupon may be submitted for its consideration.

- (8) In addition to the functions of the Chiefs of Staff as advisers on questions of sea, land or air policy respectively, to their own Board or Council, each of the three Chiefs of Staff will have an individual and collective responsibility for advising on defence policy as a whole, the three constituting, as it were, a Super-Chief of a War Staff in Commission. In carrying out this function, they will meet together for the discussion of questions which affect their joint responsibilities.
- (9) Questions relating to co-ordination of expenditure may be entertained by the Committee of Imperial Defence when referred to it by the Cabinet. The Committee (subject to any directions by the Cabinet) will consider such questions in the light of the general defence policy of the Government and of the strategical plans drawn up to give effect to that policy in time of war.
- (10) The Secretariat of the Committee of Imperial Defence will continue to act as liaison officers between the Chairman of the Committee and the Service Departments. The staff of the Committee will be strengthened by the addition of an Assistant Secretary to be nominated by the Prime Minister on the recommendation of the Secretary of State for Air, whose status will be identical with that of the three existing Assistant Secretaries nominated by the Prime Minister on the recommendation of the Secretary of State for War, the Secretary of State for India and the First Lord of the Admiralty.
- (11) The Standing Defence Sub-Committee is suppressed and its past proceedings will be merged into those of the Committee of Imperial Defence.

(C.M.D. 1938, 1923.)

SKETCH MAP

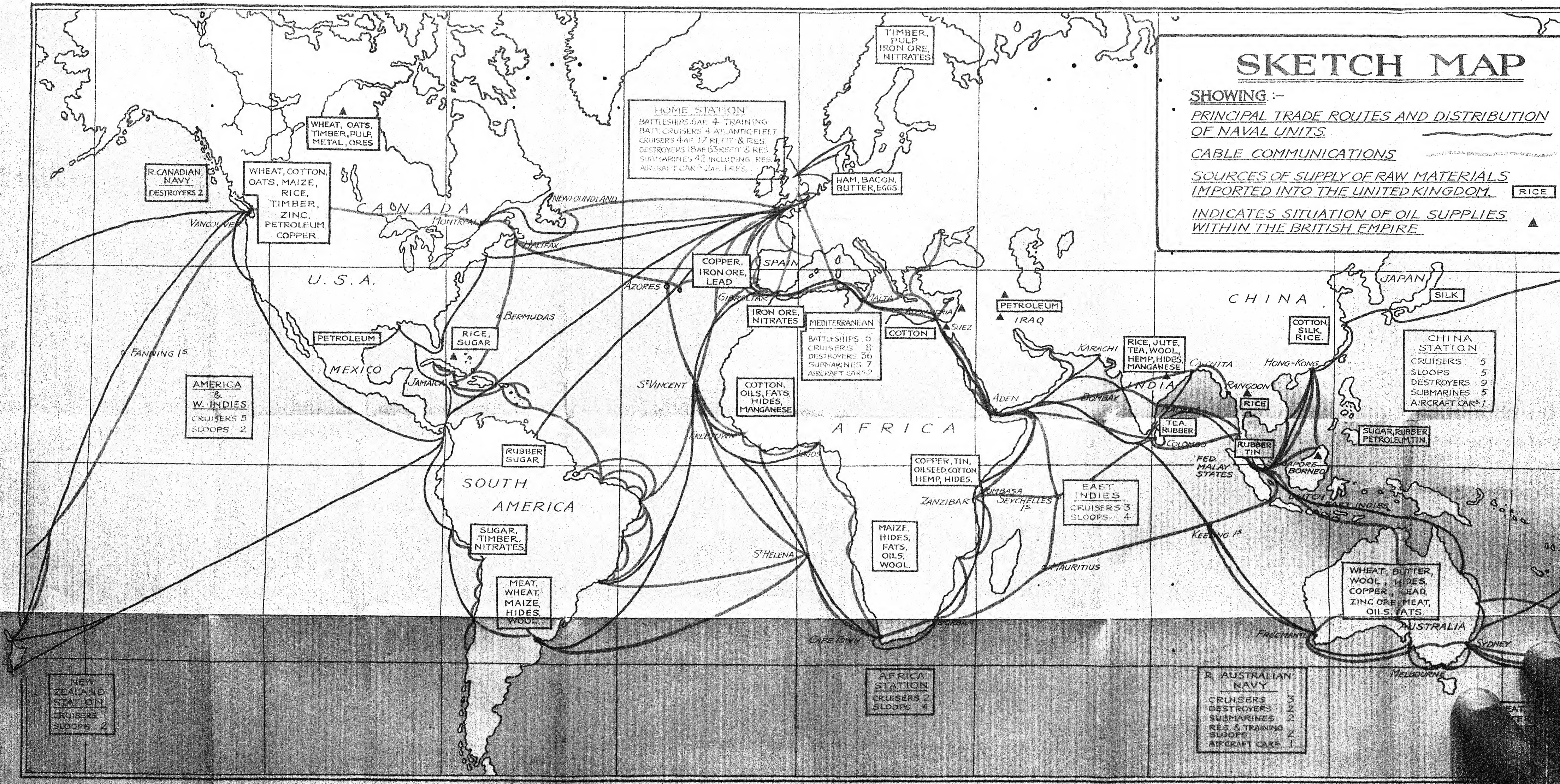
SHOWING :-

PRINCIPAL TRADE ROUTES AND DISTRIBUTION OF NAVAL UNITS.

CABLE COMMUNICATIONS

SOURCES OF SUPPLY OF RAW MATERIALS IMPORTED INTO THE UNITED KINGDOM.

INDICATES SITUATION OF OIL SUPPLIES WITHIN THE BRITISH EMPIRE



SKETCH MAP

SHOWING :-

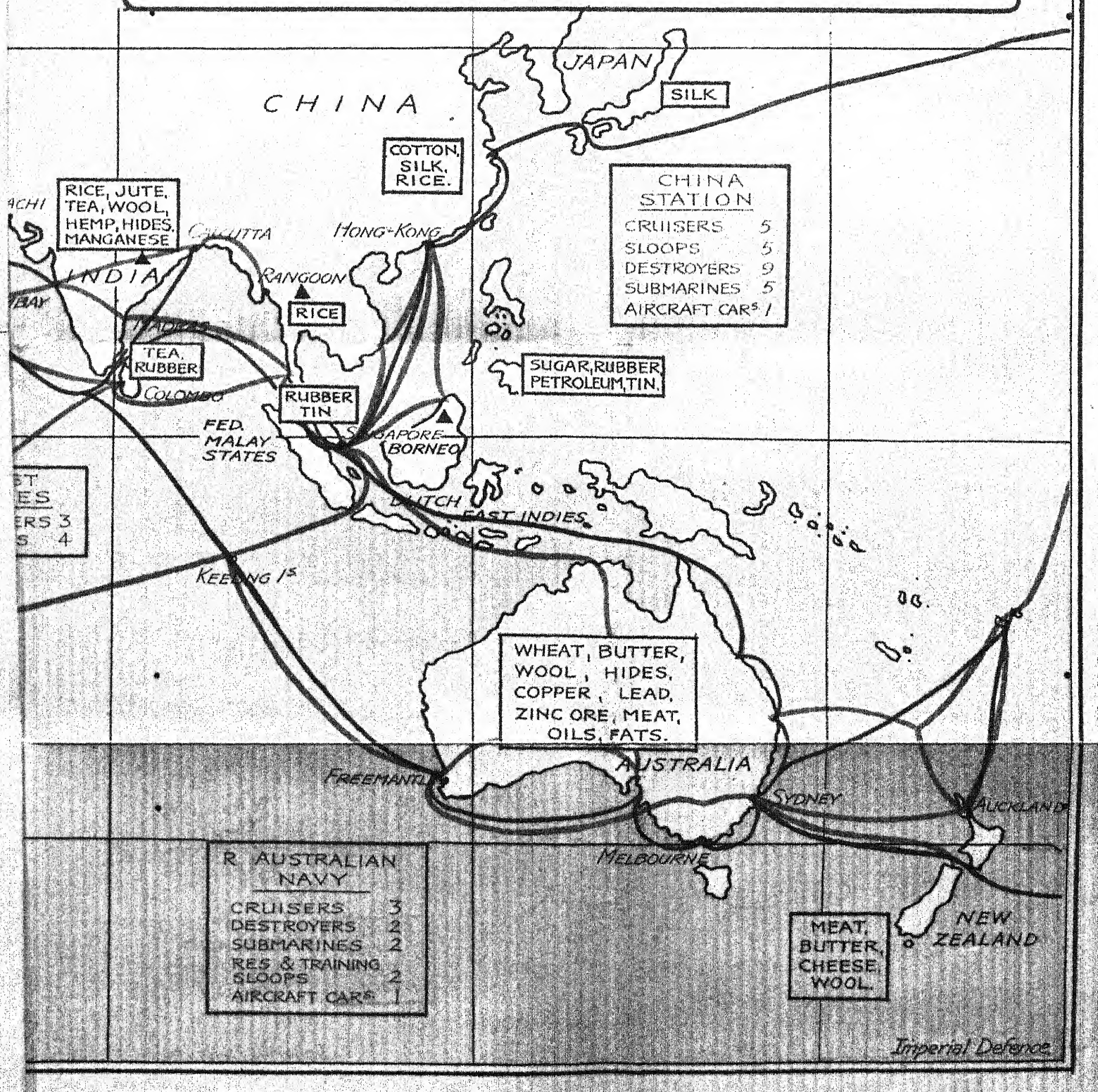
PRINCIPAL TRADE ROUTES AND DISTRIBUTION
OF NAVAL UNITS

CABLE COMMUNICATIONS

SOURCES OF SUPPLY OF RAW MATERIALS
IMPORTED INTO THE UNITED KINGDOM.

RICE

INDICATES SITUATION OF OIL SUPPLIES
WITHIN THE BRITISH EMPIRE



Imperial Defence

CHAPTER IV

THE MATERIAL RESOURCES OF THE BRITISH EMPIRE

IN an introduction to a report by the Section of Economic Science and Statistics of the British Association, the following words are used : " When future historians . . . come to write a complete account of the Great War, they will doubtless agree that superiority in supplies exercised a considerable influence in deciding the issue of the conflict. The calls on productive power have increased so rapidly during hostilities, that the war has resolved itself into a conflict between opposing economic forces. It is obvious that the limit of economic endurance depends not only upon the amount of available resources, but also upon the proper application of the resources."

Modern war reflects the changes that have taken place in social life during the nineteenth century, the most outstanding feature of which is the dependence upon machines, which make an ever-increasing and varying demand upon the supply of raw materials, upon the technical skill of industry, and, lastly, require the provision of financial resources upon an unprecedented scale.

While the conduct of any war has differed much from any one that has preceded it, it seems certain that the modern tendency to mechanize all arms of every Service will cause even greater demands to be made upon every form of economic resource.

The calls upon the economic powers of a nation under the conditions of modern war may be briefly considered under four main heads :—

1. The immense calls upon the man-power of the nation, caused by the conscription of men for military service. This tends to disorganize the industrial life of the country by the withdrawal of " pivotal " men both on the technical and administrative sides.

2. The size of modern armies and their growing dependence upon machines make it inevitable that their maintenance in the field under conditions in which fighting is almost continuous will demand vast consumption of food and clothing, ammunition, etc., all of which make heavy demands upon industry as well as upon the transport services of the country.

3. Demands upon an unprecedented scale are made upon the financial resources of the country to maintain and supply the

armies in the field and the services incidental to them. These demands upon the foreign credit of the state are made at the time when its powers to maintain its exchanges by the export of manufactured goods or raw materials are reduced to a minimum.

4. The maintenance of the efficiency of the home population by the provision of supplies of food and clothing and general necessities at reasonable prices and in adequate quantities.

It will be clear, therefore, that an appreciation of the economic resources of the Commonwealth cannot be confined solely to a consideration of the supplies of raw material, man-power, etc., available, but that consideration must, in addition, be given to the control established over them to prevent not only uneconomical utilization, but to secure that the utmost is extracted from the supplies available.

It is, therefore, proposed to examine in the first place the economic resources of the Empire in order to ascertain how far these are adequate or otherwise to meet the needs of the United Kingdom, which must, despite the rapid expansion of the manufacturing industries of certain of the Dominions, still be regarded as the industrial headquarters of the Commonwealth, and in the second place the various means whereby these resources may be most economically utilized.

In every case where it has been found possible to do so, rounded figures are given based upon the averages for the years 1925-1928. It is believed that by this means a better general survey can be obtained than by quoting figures for any single year, as these may be liable to fluctuation.* In order to reduce as far as possible the number of statistical tables, the economic resources brought under survey are those considered necessary for the maintenance of life or essential to the conduct of war, and these may be briefly sub-divided into the following classes :—

1. Resources of Raw Materials.
2. Resources of Industry.
3. Resources of Man-Power.
4. Resources of Transport.
5. Resources of Finance.

* Striking illustrations of this tendency towards fluctuation may be seen in the statistical trade returns, etc., for more recent years which reflect the present world-wide economic depression. The years 1925-1928 were, therefore, chosen as illustrating more settled and more average conditions.

1. Raw Materials.

Again, for greater convenience, raw materials may be subdivided—

- (A) Raw materials of food—*e.g.*, cereals, sugars, meats.
- (B) Raw materials of the textile industries.
- (C) Metalliferous ores.
- (D) Sources of power.

The tables throughout this chapter are uniform and should be read as follows :—

Column 1. Total consumption throughout the United Kingdom.

Column 2. Percentage of production within the United Kingdom.

Column 3. Percentage of imports into the United Kingdom from overseas British countries.

Column 4. Volume of exports from overseas British countries into foreign countries, expressed as percentage of U.K. consumption (Col. 1).

Column 5. Percentage of imports into the United Kingdom from foreign sources.

(A) Raw Materials of Food.

CEREALS.

	1.	2.	3.	4.	5.
	1,000's of cwt.	%	%	%	%
Wheat ...	129,731	21·5	39·7	90·7	38·8
Oats ...	55,697	85·5	5·3	10·9	9·2
Barley ...	36,356	55·5	12·2	33·2	32·3
Maize ...	34,741	—	11·6	21·6	88·4
Rice ...	2,790	—	46·0	2250·0	54·0

The situation in respect of those cereals which enter most prominently into both human and animal food supply is entirely satisfactory with the exception of maize. The principal Empire exporting countries are Canada, Australia and India. Supplies from foreign countries are drawn mainly from United States of America and the Argentine.

WHEAT.—Wheat is a bulky commodity, and therefore presents considerable difficulties both in transport and storage. The difficulty in regard to the latter problem is mainly overcome by the fact that wheat, either of the spring or winter sown variety, arrives in England practically throughout the year. The situation with regard to transport presents no difficulties in peace time, but

in war, when the strain on shipping is severe, it would probably be found impossible to spare the shipping to transport so bulky a cargo from places so far distant as, for example, Australia. It is, therefore, satisfactory to note that the area suitable for wheat cultivation in Canada is capable of practically limitless expansion, especially so in view of the production of new wheats which ripen early, thus allowing the Canadian wheat belt to be extended farther to the north.

MAIZE.—Maize enters partly into food used for human consumption, but mainly into that of animal food. The principal Empire exporting country is South Africa, and to a lesser extent Kenya, Uganda, the Rhodesias, Nyasaland, and Tanganyika. Foreign-grown maize is imported mainly from the Argentine, Rumania, U.S.A. and Russia.

Constituting as it does a valuable constituent of animal food, this cereal would repay cultivation in Empire countries where climatic conditions are suited to production, notably in the East African colonies and protectorates.

SUGAR.

1.	2.	3.	4.	5.
cwts.	%	%	%	%
39,229, 211	2·5	25·3	20·5	72·2

Sugar imported into Great Britain is of three kinds—cane, beet and maple sugar, the last named being insignificant in quantity.

CANE SUGAR.—The sugar cane requires a high temperature, freedom from frost, and an average rainfall of over 40 inches. The stalks grow and are cut annually, the root lasting up to twenty-five years.

BET SUGAR.—This is an annual crop which may be successfully cultivated in temperate climates in rich soil. In 1913, under various government subsidies, the world production of sugar from beet equalled that from cane. Since the war sugar beet has much declined. It is successfully cultivated, though as yet on a small scale, in the United Kingdom.

Though India is the principal producer of sugar within the Empire, none of the crop is available for export, all being consumed at home.

Other supplies, though in small quantities, are imported from Mauritius, West Indies, Australia, British Guiana and Natal.

The Empire is not self-supporting in respect of sugar and draws its principal foreign supplies from Cuba and Java.

It is probable that extensive increases in the areas suitable for the production of sugar either from cane or beet could be made within the Empire. This would be a great advantage in view of the exorbitant advances in the price of sugar caused by speculation during the war.

MEATS.

	1.	2.	3.	4.	5.
	1000's of cwts.	%	%	%	%
Beef ...	28,177	41.9	23.4	5.5	34.7
Mutton ...	10,748	46.2	33.8	1.2	20
Bacon, etc.	14,387	36.5	11.2	1	52.3

BEEF.—Beef is imported into the United Kingdom chilled or frozen and as live cattle. Apart from Great Britain herself, the chief Empire supplies are drawn from the Irish Free State (live), Australia (frozen), and small quantities chilled from Australia and New Zealand.

The greater part of foreign-grown supplies are imported (chilled) from South America, principally the Argentine.

On an average, chilled meat will remain in an edible condition for approximately thirty days, and this factor is greatly to the advantage of the South American exporters.

Cattle are found in all tropical and temperate lands. The best cattle are still produced in Europe, a large trade being done in the export of pedigree stock. The South American grass lands, particularly of the River Plate (Argentina), the high western prairies of North America, and the tropical and sub-tropical grass lands of Queensland and North Australia, where dry temperate climate and about 20 inches of rain are found, constitute the principal areas for the large scale production of meat.

Such climatic conditions obtain in many parts of the Empire, and a considerable increase in Empire production of beef for chilling should reasonably be looked for in North and South Rhodesia, the Sudan and South Africa.

Canada exports large quantities of live cattle to the U.S.A., but relatively small quantities to the United Kingdom. Other possible sources of Empire supply are Nigeria, East Africa and British Guiana. Improvements in the freezing processes, rendering such meat more palatable, would decrease U.K. dependence upon foreign supplies.

MUTTON.—The total mutton supply of the United Kingdom is produced at home and in the Empire in roughly equal proportions, New Zealand being the principal producer.

Supplies arrive to a lesser extent from Australia, where the sheep, being bred mainly for wool, are not entirely suitable for

the meat trade. Small supplies are also received from South Africa and the Irish Free State. The principal supplies from foreign sources are received from South America.

BACON, ETC.—Apart from home-grown supplies, the Irish Free State is the chief Empire producer. No other imports of any magnitude are received from Empire sources. Principal foreign supplies are received from Denmark, the United States of America, and Sweden. Upon the subject of the production of bacon, etc., in its twelfth report, the Imperial Economic Committee remarks: "The fact that Denmark, with an area of 16,000 square miles, should be able to supply the United Kingdom with nearly two-thirds of its imports of bacon . . . has been commented upon so often that it does not require further emphasis"; and further, "The Empire farmer at home and overseas can, if he will, secure by far the greater part of the British market, but if he desires to do so he must make his production at least as efficient as that of his most competent foreign rival."

(B) Raw Materials of the Textile Industries.

	1.	2.	3.	4.	5.
	1000's of bales of 100 lb.	%	%	%	%
Cotton ...	16,901	Nil	10·4	76·6	89·6
Wool ...	10,002	12·1	72·6	59·6	15·3
Jute ...	4,284	Nil	98·0	283·0	2
Hemp ...	2,024	Nil	24·6	70·7	75·4

After food and drink, the next need of man is for clothing. Clothing is an essential in temperate climates and is in the tropics the outward and visible sign of advancing civilization. The importance of this last factor in the economy of the Empire requires serious consideration, as a slight increase per head in the demand for clothing among the millions of the coloured population of the Empire will have marked effects particularly on the cotton trade of Lancashire.

In addition to cotton and wool, the two staples in the provision of clothing, hemp is utilized in the manufacture of ropes, cables, canvas, etc., and jute in that of hessian, sacking, etc.

COTTON.—Cotton constitutes one of the most important items in the general economy of the Empire, as the export of manufactured cotton goods represents the largest single item of all the exports of the United Kingdom.

Raw cotton consists of the small hairs which surround the seeds of the cotton plant. When the "boll" is ripe it bursts and is hand-picked, and a "ginning" process separates the fibre

from the seeds, which latter give a valuable oil, the refuse being used for cattle cake, etc.

A rich, well-drained soil with plenty of moisture during the period of growth and an average of six months of frostless weather are necessary for the growth of the plant and the ripening and filling of the boll. The best cotton belts of the world lie between 30° S. and 40° N., excluding the equatorial climate belt. Cotton is graded according to staple, the Sea Island cotton of Florida and the Sakellaradi variety of Egyptian cotton being long in staple and possessing the maximum of tensile strength.

The principal sources of Empire supply are India, the Sudan and Uganda. The Indian cotton is, however, not suited to the Lancashire industry, and it is exported mainly to Japan and Southern Europe. In view of the unsuitability of Indian cotton, the supplies of Empire-grown cotton are inadequate and the cotton trade is dependent upon American supplies for approximately 75 per cent. of the imports of the commodity.

Considerable efforts have recently been made to accelerate the Empire production of cotton, and considerable areas are suitable: Nigeria, Tanganyika, Rhodesia, South Africa and Queensland all possess suitable land and the climatic conditions necessary for the successful cultivation of good cotton. Good cotton can also be grown in Iraq.

As regards the manufacture of raw cotton, Lancashire possesses 40 per cent. of the world's spindles.

WOOL.—In respect of wool, the position is satisfactory, over 80 per cent. of United Kingdom consumption being home grown or supplied by Empire countries.

During the war the entire clip of all the Dominions producing wool was earmarked for export to the United Kingdom, with the result that wool prices remained at a markedly lower level than those for sugar and cotton, in which commodities Great Britain was compelled to compete with foreign buyers.

RUBBER.—

1.	2.	3.	4.	5.
tons	%	%	%	%
143,715	Nil	80	209	20

Rubber, originally a native of the forests of the Amazon, was successfully transplanted through the agency of the Botanical Gardens at Kew to Ceylon and the Malay States.

The process of vulcanization (the admixture of sulphur at a high temperature) has increased the value of rubber as a material.

A heavy rainfall and generally a climate equatorial in type is necessary for production.

The world output of rubber averages 800,000 tons and is increasing rapidly. British Malaya and Ceylon produce approximately 50 per cent. of this total. The United States of America is by far the largest consumer, taking nearly three-fifths of the total production. The Empire thus controls the market, though the Dutch East Indies production is but little short of that of Malaya.

TIMBER.—Approximately £50,000,000 worth of timber—soft wood and hard wood—is imported annually, of which about 11 per cent. is from Empire sources, the balance being of foreign supply. Empire countries, however, export to foreign countries timber to about 50 per cent. of the total value of United Kingdom imports.

Canada, Australia, India, Ceylon and Borneo are the principal producers, and further supplies could be obtained from Nigeria and the Gold Coast, Honduras, Guiana and Trinidad. Sweden and Norway are the chief foreign countries to supply soft woods.

During the war, in order to save shipping, large areas of forest were felled in England, and replacement is being carried on at the rate of between thirty and forty thousand acres per annum, chiefly with pines of various species.

(C) Metalliferous Ores.

	1.	2.	3.	4.	5.
	tons	%	%	%	%
Iron ...	1,319,800	69.5	0.4	11.8	30.1
Copper ...	38,580	0.4	59.8	160	39.8
Zinc ...	131,628	0.6	99.4	85	Nil
Tin ...	70,787	3.5	17.3	4.6	79.2
Lead ...	19,134	76.9	17.2	152	5.9
Manganese	206,862	0.3	77.7	385	22
Chromium ...	17,272	1.2	43.4	1000	55.4
Alumina ...	90,000	—	1.0	—	98.8

While the figures in the above tables indicate that dependence upon foreign supplies is considerable, it must be borne in mind, in the first place, that the entire mineral resources of the Commonwealth are partially and even in many areas totally unsurveyed. Further, minerals represent a wasting asset, and in this respect a restrictive policy of development may be in the long run of greater value than immediate large-scale production.

In the case of bulky imports, costs of transport may retard development of mineral wealth in those areas, for instance, in iron ore in Newfoundland or Australia, which are situated at great distances from Great Britain.

IRON ORE.—Newfoundland is the principal Empire producer of iron ore, though exporting mainly to Canada. Large deposits are known to exist in Australia, India and Canada. The principal sources of foreign supply are Sweden (special high-grade ores for the Sheffield cutlery trade), Algeria, Spain, France and Norway.

COPPER.—Though copper ores are widely distributed, over 50 per cent. of the world's supply is produced in the United States, which country controls nearly 70 per cent. of the total world output. Empire supplies are drawn principally from Canada, West Africa and Papua. Foreign supplies are derived mainly from Spain and Chile.

A considerable development of the copper resources of Rhodesia is now taking place, and it is calculated that this area will shortly produce up to 300,000 tons annually. Large deposits also exist in Australia and Canada.

GOLD.—The average world production of gold amounts to approximately 20,000,000 ounces, valued at £82,000,000. Of this total 70 per cent. is produced within the Empire, the Transvaal, Canada, Australia, Southern Rhodesia and India, in the order named, being the principal sources of supply.

SILVER.—Total world production averages 7·5 thousands of metric tons (1 metric ton=32,150 ounces). Of this total the Empire supplies approximately 20 per cent., Canada, Australia and Burma being the principal sources of supply.

ZINC.—For zinc ores the Empire supply is entirely satisfactory, and there is a considerable export of ores. Great Britain, however, imports considerable quantities of the metal, as her smelting capacity is insufficient to meet the demand. The sources of Empire supply are Australia, Canada and India.

TIN.—The position in respect of tin is satisfactory, though it would not so appear from a first glance at the figures given at the head of this section. The Empire actually produces about 80 per cent. of the world's supply of metallic tin, and though about 40 per cent. of the world production of tin ores is from within the Empire, principally from British Malaya and to a small degree from Nigeria and Australia, much of the tin ore is refined on the spot and exported as metal. In the case of imports of ores into the United Kingdom, the chief foreign source of supply is Bolivia.

LEAD.—The situation in respect of lead requires no comment. The principal Empire sources of supply are Australia, Canada and Burma.

MANGANESE.—Manganese is required in the manufacture of steel. The principal sources of supply in the Empire are India (Central Provinces) and the Gold Coast.

CHROME.—Chromium is employed in the manufacture of very hard steel and of rustless steel. The sources of Empire supply are Rhodesia and India. Foreign imports are from the United States of America.

ALUMINIUM.—Great Britain and Canada produce about 20 per cent. of the world supply of aluminium. Great Britain imports practically her entire supply of bauxite from France, and Canada large quantities from the U.S.A. Large deposits of bauxite exist in British Guiana, India, Australia and the Seychelles. The industry is an important and growing one in particular for automobile production.

The following metalliferous ores or metals, all important in industry, are arranged in the following three categories :—

- (a) Those in which the Commonwealth is self-supporting.
- (b) Those in which Commonwealth supplies could be developed to supply Commonwealth needs; and
- (c) Those in which dependence on outside supplies is necessary.

Section (a).—Asbestos, cobalt, graphite, nickel, tungsten.

Section (b).—Thorium, barium, cadmium.

Section (c).—Borax, mercury, platinum, sulphur, antimony, borates.

D. Sources of Power.

Coal, oil and moving water represent at present the three main sources of power. One marked difference exists between the first two and the last source of power.

Coal and oil, once consumed, cannot be replaced, while water power is renewable, the first two representing "capital," the third "income" expenditure.

While coal still stands first in value as a producer of power, it suffers in comparison with the other two by reason of its bulk. This has tended towards the centralization of industry in the areas of coal production. The new forms of power are capable of far wider and more economical distribution. An example of this tendency may be noticed in Great Britain, where in recent years the newer industries based upon electric power have moved towards the south of England.

COAL.—The world's production of coal in 1925, the year before the Coal Strike in Great Britain, was 1,350 million metric tons.

The principal producing countries and the amount of production are as follows in millions of tons for the year 1929 :—

Great Britain...	...	...	...	...	268
United States of America	...	...	...	...	546
Germany	...	...	...	...	163

Of the total produced in Great Britain, 54,000,000 tons were exported and 16,000,000 tons sold as bunker coal to foreign vessels.

It was estimated that the reserve of supplies of coal in the United Kingdom were sufficient to last another century, being 100,000 million tons. The estimated Commonwealth reserves are 1,500 million tons, though the African supply is as yet not accurately known. The principal Commonwealth sources of supply, actual and potential, are Canada, Australia and New Zealand, South Africa, Rhodesia, Nigeria, India. A recent notice in the press states that immense supplies have been located in the mandated area of Tanganyika Territory.

"Although" (as will be seen in the ensuing paragraphs) "the Empire contains only a very small percentage of the world's known oil resources, it controls the world's greatest fuel resources. It would seem to be a sound policy, therefore, to aim at converting coal, lignite and shale into products that will provide substitutes for oil, and this—thanks to modern science—can be achieved. Coal-oil products, when recovered in a proper state, lend themselves to the refining treatment, whereby all various oils, such as fuel oil, Diesel oil, petrol, burning oil, etc., of equal purity and efficiency to well oils, can be obtained. A multitude of synthetic dyes, disinfectants, explosives and medicines also have their base in coal."*

PETROLEUM OIL.—

1.	2.	3.	4.	5.
galls.	%	%	%	%
610,616,000	7.6	0.4	13	92

The importance of oil in both the industrial and military spheres has become universally recognized. "The Allies," said Lord Curzon, "floated to victory on a sea of oil." Nor is the phrase far removed from the truth.

Whether in crude form for burning or in the more economical compression-ignition type of engine, its use is practically universal among the navies of the world.

The advantages of oil are so overwhelming as hardly to need discussion. Weight for weight, it gives greater speed, requires

* Grondona : "Empire Stocktaking." By permission of Messrs. Simkin Marshall.

less time in intake and no subsequent trimming. It raises steam by the turning of a tap, and is consequently more economical in use. Compared with coal, it is clean in use, giving longer life to machinery.*

The increased dependence of military forces upon motor-power and the growth of mechanized fighting vehicles and the advance of aircraft have made the necessary supplies of petrol a vital factor in the military operations of the future.

The use to which mechanically propelled vehicles are put in industrial life is a matter of common knowledge, the most instructive example of which is to be found in the weekly return of traffic published by the railway companies of Great Britain.

The continuous increase in the use for all purposes of mechanized vehicles has made oil a leading subject in the politics of the day, and it must clearly be a matter for anxiety that Commonwealth resources are small. The oil supply of the Commonwealth must be considered under two heads—

- (a) The annual production and consumption ; and
- (b) The situation of sources of supply.

(a) *Annual Production and Consumption.*

The figures given at the head of this section indicate that the total output from all Empire sources is one-fifth of the needs of the United Kingdom alone, and that consequently the United Kingdom is dependent upon foreign supply for practically her entire supply of petroleum. The principal producers of oil are :—

	% of World Production.				
United States of America	67.3
Venezuela	9.3
Union Soviet Socialist Republic	6.4
Mexico	3.2
Persia	2.8
Rumania	2.3
Dutch East Indies	2.3
Burma, Trinidad, Sarawak	1.8
Columbia	1.2
Other countries	3.4

* In a recent publication, "The Navies of To-day and To-morrow" (Ackworth), the author draws attention to the present dependence upon oil of both the military and mercantile fleets of the Commonwealth. It is argued that the necessity for safeguarding the routes over which supplies of oil are transported entails a charge out of due proportion to the extra value that may be received from the burning of foreign-produced oil rather than home produced coal or of the oil that might be extracted from it.

It may be noted in addition that the export trade in coal has played a large part in building up this country's position in world trade and given her the opportunity largely to control the world's shipping routes. The replacement of coal by oil has seriously damaged this position. It is understood that Imperial Chemicals, Ltd., is to undertake on a large scale the extraction of oil fuel from coal by the hydrogenation process.

The general control of the world's oil production is not, however, in the hands of the nationals of the countries in which it is produced, but in the hands of the operating combines. World production is practically controlled by American and British-Dutch groups. Russia and Japan, speaking in general terms, are outside any combine. The Persian oil-fields are under British control, and the oil of Mexico is shared between both groups. The policies of the two groups are in direct contrast, the British-Dutch group following a policy of steady production and conservation of supply. So rapid has been American exploitation that it is thought that the visible supply may be exhausted in thirty years. Any such estimates must, however, be taken with caution, as the oil surveys of the world are at present incomplete and where undertaken not final or exact. The existence of supplies within the Commonwealth is, therefore, of great importance and will be noticed.

(i) *Canada*.—Production is at present small and supplies exist in Ontario and Alberta (70,000 metric tons). Large fields are believed to exist in the north, the exploitation of which presents transportation problems of considerable difficulty, but further possibilities of expansion in Alberta are likely.*

(ii) *Trinidad*.—Oil has been produced in Trinidad since 1908, and the development is proceeding satisfactorily, Trinidad being the second largest producer of oil in the Commonwealth. Annual production is about two million gallons.

Four refineries are at work in the colony, and all grades of petroleum products are produced.

(iii) *Iraq*.—An examination of the petroliferous areas round Mosul was made before the Great War by German geologists, who reported the conditions the finest then known. Seven test wells have been drilled in the Mosul area with successful results.

Oil-fields also exist at Khaniquin, on the 'Iraq-Persian border. The Persian oil-fields at Maidun-el-Nafta, whence a pipe line runs to Abadan on the Persian Gulf, are at present the most important sources of supply directly under British control, though not in British territory.

(iv) *India*.—Small fields exist in the Punjab and in Assam.

(v) *Burma*.—Oil in Burma is produced mainly at Yenangyuang by the Burma Oil Company, a subsidiary of the Shell Company. Production is approximately 300,000,000 gallons annually.

* A recent Press Notice states that, following the discovery of new methods of treatment, the area of petroliferous sand situated in Alberta may be capable of supplying the entire needs of the Commonwealth.

The oil is piped to the refineries at Rangoon, a distance of nearly three hundred miles. Other petroliferous areas are known to exist in Burma in the Singu and Yenangyah districts.

(vi) *Sarawak*.—A considerable oil-field is being developed at Miri and Ballong in the Baram district, the developing companies being the Shell and the Royal Dutch.

Evidences of oil in Brunei exist, but to the present production is not on a commercial scale.

(vii) *New Zealand*.—Oil is known to exist and small quantities have been produced. No oil is believed to exist in Australia.

No oil supplies are known to exist in Africa, except in Egypt, where the wells of Jemsah and Hurgada on the Red Sea produce annually approximately 200,000 metric tons. A refining plant has been established at Suez.

OIL SHALE.—The shale is mined and the oil obtained by destructive distillation. The process is expensive and is not a commercial possibility under the present low prices ruling for petroleum.

Mineral oil is also obtained from the treatment of low-grade coals, as much as 100 gallons per ton being obtained. Large supplies of low-grade coals are found in the Commonwealth.*

(b) The Distribution of the Oil-Fields of the Commonwealth.

This can best be studied on the map (p. 79) in their relation to general lines of communication. Oil has considerable advantages over coal in that it may be conveyed great distances by pipe line, though the laying of these is expensive and under certain circumstances and in certain places would require much protection; moreover, the production of a given field must be large enough to make the building of a pipe line commercially profitable. For movement across the sea, a special type of vessel is required, and large storage facilities must be provided at terminal refineries or suitable refuelling positions along the lines of sea communications. The provision of large storage facilities for the petrol required in a land campaign would also be a considerable problem.

The proper siting of refuelling positions has a bearing upon—

- (a) Sea lines of communication;
- (b) Air lines of communication;
- (c) Existing and projected land lines

as it is not improbable that many of these will depend upon locomotives burning crude oil or having engines of the Diesel type.

* It is understood that the production of oil from coal by a process of hydrogenation is to be undertaken by Imperial Chemicals, Ltd.

(i) *Canada*.—The position of Canada is of considerable importance as it is the terminal of the Atlantic sea and air routes and also a terminal of the Pacific sea route; the development of the oil resources of Canada is therefore an urgent necessity.

(ii) *Great Britain*.—Though no oil exists in the United Kingdom, the development of oil distillation from coal is likely to increase. There are already large crude-oil refineries in South Wales. Great Britain is also well supplied with oil "tankers."

(iii) *Mediterranean Area*.—One of the conditions under which the Turkish Petroleum Company is to develop the oil of the Mosul area is that, should production be sufficient, a pipe line is to be constructed to the Mediterranean.* This will clearly be of great importance to the naval forces based on Malta and Gibraltar and to the Imperial Air Services to the East now in course of development.

The refineries at Suez also are conveniently placed upon the sea and air lines of the Commonwealth.

(iv) *Iraq*.—The Anglo-Persian Oil Company's refinery at Abadan is conveniently situated for the supply of oil to Bombay and Colombo and for the use of aircraft.

(v) *India*.—The development of the Indian oil-field in the Punjab and of the refineries at Rawalpindi, whence it has been piped from Attock, should make it possible to supply aircraft and mechanical transport operating on the North-West Frontier.

Native supplies should be available along the proposed Imperial Air Line extension from Karachi to Delhi.

The oil-fields and refineries in Assam should supply the second section of the air route from Delhi to Calcutta, while the third stage would be supplied by the Burma oil-fields, which are delivered by pipe line nearly three hundred miles from Yenangyuang to the refineries at Rangoon.

Supplies of oil for Singapore and for the section of the air route between Singapore and Port Darwin are available from Dutch sources or Sarawak. The close relations existing between British and Dutch oil interests are therefore of great importance in the strategic problems of the Pacific.

* In an agreement recently concluded between the French and British Governments, work is to be begun immediately upon the construction of the oil pipe line from the Mosul area to the Mediterranean littoral. The line will proceed from Kirkirk to Haditha, where it will bifurcate, the French section passing through Ala Kemal, Palmyra to Tripoli, the British passing through Rutbah Wells to Haifa, the total length of the lines being 1,200 miles. Both must be ready by 1935. It is expected that the oil produced from Empire sources will be increased by 2,000,000 tons annually.

(vi) *Australia*.—It is to be regretted that Australia is totally deficient of supplies of oil. Test borings have been carried out in Papua over a considerable area. Supplies from Borneo and the Dutch East Indies are available. Some success has been attained in New Zealand.

It will be seen that on the main sea axis of the Empire facilities exist which, though at present inadequate, are capable of considerable expansion.

Sea and Air Routes in the South Atlantic.

On these routes the position of the oil-fields and refineries of Trinidad are of importance, as the island lies near one of the main shipping routes to the Panama Canal.

In the event of the development of the air routes to the West Indies and beyond to the principal centres of the South American continent, the strategic and commercial value of these oil supplies will be much enhanced.

HYDRO-ELECTRIC POWER.—While the power of running water as a motive force has long been utilized, it is only recently that in the generation of electricity its use has become generally recognized. The possibility of the carriage of the electricity thus generated over several hundreds of miles is a fact of great significance.

The power of running water is greatest in mountain regions in which supplies of oil and coal are absent. Considerable developments of this new source of power have taken place in many parts of Europe and America. Travellers in Italy will have noticed the extensive use of electrical power, particularly in the north, which has taken place since the war. Its importance in industry is manifest.

Considerable development has also taken place in Northern India, Australia, New Zealand and Canada.

No accurate statistics yet exist of the horse-power available within the Commonwealth; that in Canada is estimated at 32,000,000 horse-power, while the power to be derived from the African rivers is probably illimitable, and it is stated that the power of the Victoria Falls exceeds that of Niagara. The development of hydro-electric schemes in Tanganyika is also shortly to be undertaken.

These and other sources of water power may have an important bearing upon the railway development of Africa, which is deficient in coal supply and is believed to be totally so in oil with the exception of the wells on the Red Sea coast at Jemsah and Hurgada.

2. Resources of Industry.

Although Great Britain was a considerable industrial power during the latter half of the eighteenth century, her rise to a predominant position began roughly at the end of the Napoleonic Wars. It is based mainly upon the use of coal for power and upon iron and steel for purposes of construction. Coal is the heaviest in total bulk of all the minerals produced, and consequently industry which draws its power from coal has gravitated towards this source of power. A study of an industrial map of Great Britain will show that the main manufacturing towns are, with one notable exception—London—centred round the coal-fields. These main areas are five in number, and, with the principal towns and industries, are enumerated below :—

(a) *Coalfields in Clyde and Forth Valleys, Lanark and Ayr.*

Ship building	}	Glasgow, Coatbridge, Kilmarnock, Falkirk, Paisley.
Iron and steel works		
Engine and machine works		
Cotton spinning		
Jute works		

(b) *Coalfields in the Northumberland and Durham Areas.*

Ship building	}	Newcastle, Sunderland, Hartlepool, Middlesbrough, Darlington.
Locomotive building		
Armament works		

(c) *Coalfields in the Lancashire and Staffordshire Areas.*

Cotton spinning and weaving	}	Oldham, Bolton, Preston, Rochdale, Manchester, Crewe, Stoke, Hanley.
Pottery		
Locomotive engineering		

(d) *Coalfields of Yorkshire, Derbyshire and Nottingham Areas.*

Steel goods	}	Leeds, Bradford, Sheffield, Derby, Northampton, Coventry, Birmingham, Burton.
Iron and steel works		
Woollens		
Boots and leather goods		
generally		
Motor cars and cycles		
Brewing		

(e) *Coalfields of the South Wales Area.*

Smelting of silver, tin, lead, etc.	}	Merthyr, Cardiff, Swansea, Llanelly.
Tin plate works		

The London area derives its importance from the fact that it is the financial and governmental centre of Great Britain and the Commonwealth. It is also a port of first-class importance facing the main industrial areas of North-Western Europe.

Of later years the industrial importance of London has grown rapidly. This may be due to the discoveries of coal in Kent and the general trend towards the establishment of smaller factories widely scattered and drawing their power from electricity, as against the older form of large units near the coalfields. In 1926 the Ministry of Labour Gazette showed that 25 per cent. of all insured persons were to be found in the London and south-eastern area, and the number is increasing.

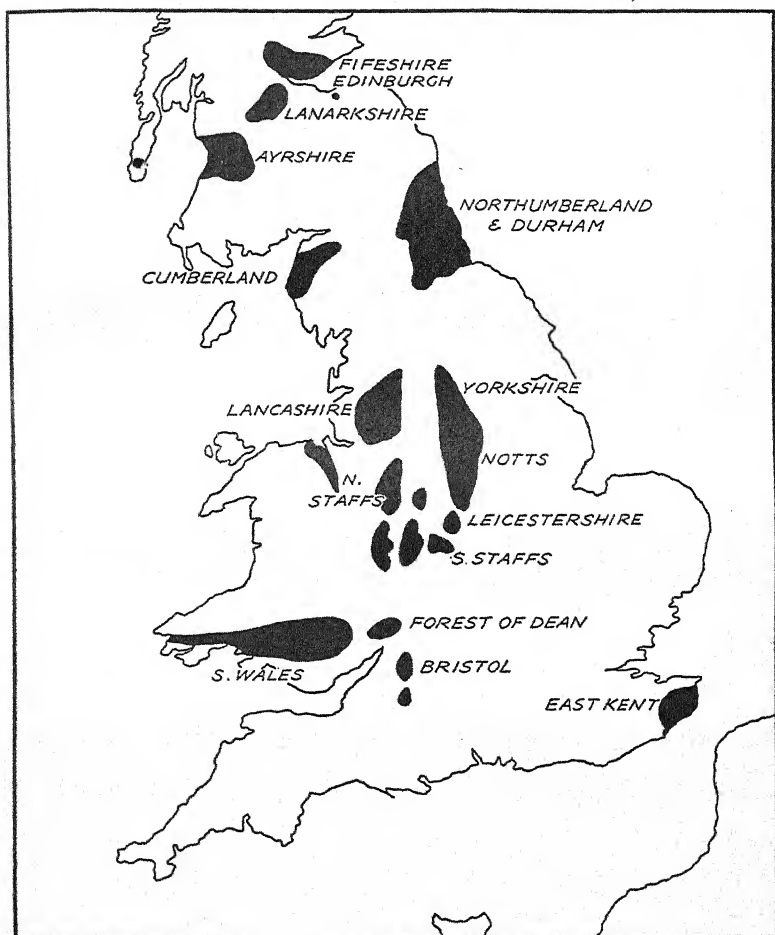
The latest available census figures* show that approximately 60 per cent. of all persons over the age of twelve years were employed in Great Britain, and of these, some twenty millions in number, the percentage of employed persons in the following essential occupations was—

	Per cent.
Manufacture of textiles	16
Transport and communications	13
Manufacture of metals, implements, machines, conveyances	12
Agriculture and fishing	8
Mining and quarrying	7
Chemical and rubber industries	1

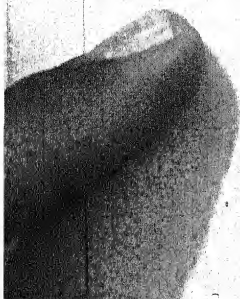
An examination of the figures for the Dominions indicates a similar percentage of employment, though, as would be expected, the percentages for individual occupations show that the agricultural and mining industries employ greater relative numbers than in the case of Great Britain. The principal manufacturing industries of the overseas Empire are concerned with the working up of the products of the field or the mine, though in Canada the production of automobiles, cotton yarns and cloths, railway rolling stock, castings and forgings are included within the first fifteen most important industrial undertakings, and out of a total of six hundred thousand persons employed in the manufacturing industries in Canada, over 20 per cent. are employed in engineering and allied trades.

Apart from the Tata works at Jamshidpur, with an annual output of $1\frac{1}{2}$ million tons of pig iron and steel, with its allied industries, cement works, chemical factories, hydro-electric power plants, and certain large-scale undertakings producing cotton yarns and

* Based upon the figures of the decennial census of 1921.



Sketch Map Shewing the Distribution of Coal Areas in
UNITED KINGDOM



cloths, the manufacturing resources of the overseas Empire, save those mentioned above in India and Canada, have not either in organization, output or rationalized efficiency reached the standard of the majority of similar undertakings in Europe or America.

It is, therefore, clear that at present and for long to come Great Britain is the technical base of the Empire, and though the growth of manufacturing industry in the overseas Empire is an advantage strategically, enabling transport to be saved by meeting in some measure local demands from local resources and supplies, the needs of the Empire must continue in great measure to be satisfied from England.

It is, therefore, a matter for satisfaction that, under the organization known as the Ministry of Munitions, the British engineering industry proved itself able to meet the demands made upon it not only by British but by foreign armies; the supplies of explosives and of completed rounds of artillery ammunition alone being increased within five years by 500 and 300 per cent. respectively.

Nor can it escape notice that the changes in industry under the name of rationalization, and resulting in large-scale amalgamations and the elimination of unprofitable enterprises, cannot fail greatly to increase the industrial strength of the country, and by the concentration of administrative control enable industries to change from peace-time to war-time output with the minimum of delay. The growth of mass production and dependence upon machines will also be found to admit of considerable dilutions of skilled labour, particularly by women.

Apart from its direct contribution to the strength of the Commonwealth by its ability to supply warlike material, British industry continues in two other important directions to be the main base upon which the real power of the Commonwealth rests.

As is well known, thanks to natural advantages in respect of certain minerals, ready access to the sea, freedom from entanglement in continental affairs and great experience in world trade due mainly to the advantage of her position of sea centrality, England became the workshop, the carrier and the financial centre of the world, from which position two most notable results followed.

Firstly, the growth of industry was accompanied by a great increase in population; and, secondly, England built up sufficient reserves of capital to be in a position to finance the development of her own overseas possessions and other foreign territories, so that these became suppliers of raw materials and food for her growing population and markets for her manufactured goods.

This growth in population, wealth and overseas investment is as follows :—

Year.	Population.	Estimated Wealth.	Overseas Investment.	Imports and Exports.
		£	£	£
1800	...	8,000,000	1,750,000,000	50,000,000
1850	...	17,000,000	2,500,000,000	500,000,000
1900	...	33,000,000	12,000,000,000	2,000,000,000
				800,000,000

Accurate figures illustrative of the economic development of the Empire are not available over the same period of years, but it is calculated that the present total wealth of the overseas British countries is approximately £30,000,000,000, making, with that of Great Britain, a figure equivalent roughly to 20 per cent. of the world's total wealth. The growth of the overseas British countries may be to some extent appreciated by the figures showing the growth in their trade :—

Year.						Total Trade.
						£
1810	...	...	...	...	...	46,000,000
1880	...	...	...	...	...	319,000,000
1900	...	...	...	...	...	471,000,000
1913	...	...	...	...	...	959,000,000
1920	...	...	...	...	...	2,112,000,000
1928	...	...	...	...	...	2,053,000,000

The figures of the total trade for the years 1913 and 1928 for the U.S.A. and Great Britain were as follows :—

						U.S.A.	United Kingdom.
1913	...	...	...	...	...	868	1,184
1928	...	...	...	...	...	1,855	1,799

These figures show, first, that the development of the trade of the overseas Empire has since 1913 grown more rapidly than that of the United Kingdom; and, secondly, that it exceeds that of the U.S.A. The overseas British countries regarded as a single unit have the greatest volume of trade in the entire world.

3. Resources in Man-Power.

The latest available statistics show that the total white population of the Commonwealth in round figures is as follows :—

Great Britain and Ireland	...	...	...	...	48,000,000
Canada	...	...	...	...	9,000,000
Australia	...	...	...	...	6,000,000
New Zealand	...	...	...	...	1,500,000
South Africa	...	...	...	...	1,750,000
Total	...	...	...	...	66,250,000

A rough comparison of the areas and population of the leading nations is as follows :—

	<i>Population.</i>	<i>Area.</i> Sq. Miles.
British Commonwealth	453,750,000	13,730,000
Russia	149,350,000	7,850,000
France	105,080,000	4,700,000
Germany	62,000,000	182,000
U.S.A.	114,000,000	3,575,000
Japan	83,454,000	260,783

A rough calculation of the ratio of persons to square miles of area shows :—

Commonwealth	... ..	5 : 1
France ... ..	... ..	21 : 1
Germany ... ..	... ..	395 : 1
U.S.A. ... ..	... ..	28 : 1
Japan ... ..	... ..	320 : 1

A comparison of these figures shows how greatly undermanned the Commonwealth is. The weakness of the position does not rest here. The two other nations largest both in area and in population—Russia and the United States of America—are self-contained units.

In the case of France, and probably Russia, the entire male population of suitable age may be called upon to render active fighting service, while in the case of the British Commonwealth upon the white peoples alone so far has rested the main burden of defence, though the coloured races were enrolled for non-combatant labour services during the last war, and would be so called upon again.

The major concentration of population in Great Britain is a considerable advantage from the point of view of any war fought on the continent, but it would place an intolerable burden upon the transport facilities of the country if a first-class war were to be fought elsewhere.

Since, as has already been noticed, defence is not to-day solely a question of a sufficiency of man-power for the national armies or labour for munition factories, but of the utilization of every economic resource, the present distribution of the inadequate supply of the man-power available is also a question of importance. The fact that the Commonwealth is undermanned not only lays a heavy burden of defence upon its manhood, but tempts others less liberally supplied with territory to regard the present policy of exclusion with jealousy, especially so on the part of Europeans who are, as compared with Great Britain, badly supplied with lands in the temperate zone to which they can export their

surplus population. The figures in this respect are particularly striking :—

	<i>Total Area.*</i>	<i>Area in—</i>		<i>Total Population.†</i>		<i>Ratio of White Pop. to sq. m. of temp. land.</i>
		<i>Temp. Zone.*</i>	<i>Trop. Zone*</i>	<i>White.</i>	<i>Non-White.</i>	
France ...	4.5	0.5	4	39	60	78 : 1
Italy ...	1.2	0.2	1	40	2	210 : 1
Japan ...	0.26	0.26	—	—	83	319 : 1
U.S.A. ...	3.75	3	0.75	106	14	35 : 1
Empire ...	14.00	7.8	6.2	70	380	9 : 1

* Millions of square miles.

† In Millions.

As the temperate areas are those in which man has achieved his greatest economic development, the value of these territories as future sources of economic strength is plain.

In 1921 an Empire Settlement Act, authorizing expenditure up to £3,000,000 per annum upon training, assisted passages and settlement grants, attempted to organize migration upon scientific lines, but the results have not so far been encouraging.

4. Resources of Finance.

It has already been noticed that the change in England from an agricultural to an industrial society had been accompanied by vast increases both in population and visible wealth. In addition to these sources of strength, sea centrality has given England a predominant position in the realm of international finance. A very high proportion of the trade of the world is carried in British ships and paid for by bills drawn on London and insured by British firms, in all of which transactions certain profits accrue to the country.*

* The value of the services rendered by shipping may be judged from the following table :—

					£
1925	...	...	...	...	124 millions.
1926	...	...	...	...	120 "
1927	...	...	...	...	140 "
1928	...	...	...	...	130 "
1929	...	...	...	...	163 "

These figures constitute approximately one-third of the total of "invisible" exports, which, with the visible adverse balance of trade for the same years, were—

	<i>Total Invisible Exports.</i>	<i>Visible Adverse Balance of Trade.</i>	<i>Net Balance.</i>
	£	£	£
1925 ...	449 millions	395 millions	+54 millions.
1926 ...	465 "	477 "	- 12 "
1927 ...	504 "	390 "	+114 "
1928 ...	510 "	358 "	+152 "
1929 ...	517 "	366 "	+151 "

It was this position of stability and credit which enabled England to bear, though not without difficulty, on her own behalf and of her allies, the tremendous financial burdens of the war. The total cost of the war has been estimated as follows :—

				£
British expenditure	...	...	...	6,460 millions.
Loans to Allies	...	...	...	1,831 „
● Total	...	...	...	<u>8,291 „</u>

During the war Great Britain was forced to sell her securities in foreign countries, amounting in the case of such sales to the United States alone to £800,000,000, an equivalent of 25 per cent. of her total overseas investments. Since the war she has, while repaying her debt to the U.S.A. at the rate of nearly £100,000 a day, been receiving but a small part in return either from friends or her late enemies. Yet despite this, her great financial strength is shown by the fact that her investments overseas now stand at approximately £3,500 millions. This position is thus described by Sir Stanley Leathes, "The People on its Trial" *:—"Even the expenditure on the war, our debts to the United States, our un-repaid advances to most of the countries of Europe, and our sales of foreign securities have not shaken our position. It was thought that after the war the United States, the greatest of world creditors and the possessors of nearly all the free gold, would become the centre of world finance; but the good-will, the prestige, the tradition, the reputation, the system of British finance have restored the old-time channels of credit. . . . The exchange of all the world for sugar, tea, coffee, spices, wool, leather, rubber, vegetable oils, furs, and the principal non-ferrous metals, is centred in London."

5. Resources of Transport.

Lloyd's register for 1930 gives the following figures for all steamers and sailing vessels over 100 tons :—

	No. of Vessels.	Gross Tonnage.
British Empire	10,754	23,381,614
For vessels under every flag	32,713	69,607,644

The total shipping of the Commonwealth thus constitutes roughly one-third both as to numbers and tonnage of the total world's supply.

There are employed in the mercantile marine and fishing fleets approximately 170,000 British seamen.

* Sir S. Leathes : "The People on Its Trial." By permission of Messrs. Heinemann.

One of the outstanding factors in the development of modern industrial civilization has been the revolution in maritime transport, in which the lead has been held by Great Britain from the time of the Napoleonic Wars and consistently maintained in the face of intense competition from foreign states. "In the School of unrestricted competition British owners had become quick to respond to the needs of the world's commerce and to adapt the design of their vessels to the needs of particular trades. No other great maritime State placed its shipping so freely at the disposal of all countries. Many British lines ran regularly between foreign ports, and the ubiquitous tramps carried the Red Ensign wherever there was a charter to be obtained. While the freight earnings of British shipping assisted to adjust the trade balance of Great Britain, the services of the ship contributed largely to the economic development of the world, especially by distributing the products of the great agricultural countries such as Canada, Australia and Argentina, and in this way they built up new sources of foodstuffs and raw material for the British people, new markets for British manufacturers, and new fields for the investment of British capital. The outstanding characteristic of British shipping at the beginning of the twentieth century was the size of its contribution to that pool of fluid tonnage on which all nations draw to cope with emergency demands, or with the seasonal fluctuation in volume of traffic as between route and route."*

It will be seen, therefore, that British shipping has played no small part in promoting the growth of civilization, and in so doing has built up Britain's prosperity. Indeed, it would be no exaggeration to say that the existence of the Empire in general and of England in particular depends upon her ability to control the continuity and safety of her shipping. On a very conservative estimate of earnings, the contribution to the material wealth of the services rendered by the shipping industry (owners, brokers, insurers, etc.) pays for all the raw material imported into England or for 80 per cent. of her imported food and drink.

The value of the shipping services rendered by the British mercantile marine has been universally acknowledged even if it is not so accurately known. These will be briefly recapitulated so as to show the demands made and the manner in which they were met under the organization known as the Ministry of Shipping, which, like other special organizations set up during the war, aimed, by eliminating wasteful competition and preventing uneconomic utilization of resources, to secure the maximum efficiency of the shipping services available. This was achieved in the main by the requisition of all liners at fixed rates. Shipping resources

* "Encyclopædia Britannica," 14th Edition. By permission of the Directors.

were thereby incorporated in the general transportation system of the country.

Allocations of shipping for essential services were as follows :—

Transportation and supply of various E.E.Fs.	...	405 ships.
Royal Navy—Auxiliaries—Coaling and supplies	...	400 „
Raw materials for industry and munitions	... ..	350 „
Food and necessities of civil population	... ..	750 „
For allied needs	... ..	500 „

The losses incurred by British shipping during the whole course of the war amounted to 2,479 vessels, of a total dead weight tonnage of 7,754,000, an equivalent of 38 per cent. of the total registered British tonnage at the beginning of the war.*

It was well that such losses were incurred by the nation who alone was able to make them good. Great Britain's supremacy in ship-building was before the war unchallenged ; indeed, up to the end of the nineteenth century, she built the greater majority of the ships of the world, and even to-day, despite fierce competition, builds 50 per cent. During the war, despite the calls upon the ship-building resources of the country for fighting ships as well as for repairs necessitated by enemy action and normal refits, the output of new tonnage leaving British yards was—

1914	...	...	...	...	...	1,624,000 tons.
1915	...	...	...	...	...	651,000 „
1916	...	...	...	...	...	608,000 „
1917	...	...	...	...	...	1,229,000 „
1918	...	...	...	...	...	1,579,000 „

During the course of a single year, ocean tonnage cleared at or from British ports is approximately 170,000,000, the figures for principal ports being—

	<i>Entered.</i>					<i>Cleared.</i>
	In thousands of tons.					
Bristol	2,270	2,113
Cardiff	5,497	7,293
Dover	1,845	1,827
Grimsby	2,082	2,265
Harwich	1,589	1,573
Hull	4,768	4,260
Liverpool	13,590	12,687
London	18,251	16,107
Southampton	9,274	9,263
Newcastle	5,885	6,830

It will be observed that, of 170 millions tons of shipping entering and leaving British ports, 112 millions are cleared from seven ports all lying within easy flying distance of the Continent.

* For a full account see Fayle—Sea-borne Trade Vol. II.

General Conclusions from the Survey of the Material Resources of the Empire.

Containing upwards of one-fifth of the lands of the world and with possessions embracing every variety of climate and geological formation, the Empire has access within her own borders to practically every form of raw material necessary to life or the maintenance of industry.

The position in regard to cereals is satisfactory; an increase of 1 per cent. in the production both of oats and barley would make the Empire self-supporting, as it already is in rice and wheat. The total production of maize is, however, only about 60 per cent. of Empire requirements.

The position in regard to beef is generally satisfactory since the main balance of foreign supply is from the Argentine, in which country British capital is largely invested, and there is also a long-standing friendship between the two countries. An increase in the Empire supply is at present mainly checked by technical difficulties connected with the freezing and defrosting of the carcasses of cattle, difficulties which are not experienced in the freezing of the smaller carcasses of sheep.

The situation in regard to the raw materials of the textile industries is, with the notable exception of cotton, satisfactory.

Though there are many areas within the Empire suitable for the production of high-grade cotton, the crop can only be grown on a commercial basis in areas in which a considerable amount of development of irrigation and transport facilities has already taken place. Successful cultivation also depends upon a plentiful labour supply. The Empire Cotton Growing Corporation was established in 1921 to supervise and to co-ordinate the many steps necessary to increase the production of this commodity which is essential both for clothing and for the manufacture of explosives.

With regard to minerals, though there exist many deficiencies, it is certain that further surveying and developmental work will reduce, if not entirely eliminate, the shortage in those minerals which are already produced within the Empire.

Empire produced gold and silver account for nearly 75 per cent. and 20 per cent. respectively of the world output of these commodities, and in respect of iron more than sufficient supplies are available, though at present more than 30 per cent. of the iron imported into the United Kingdom is from foreign sources.

At present about 70 per cent. of the world's supply of copper is under American control, but developments now in course of operation in Rhodesia, Canada and Australia will make the Empire an exporter rather than an importer of this metal. The Empire produces more than half the world's supplies of tin ore and controls

90 per cent. of the actual production of the metal. The Empire is an exporter of lead, and more than the required tonnage is available on demand.

At present America and Belgium are the foremost producers of zinc, the United Kingdom taking third place, though in the production of the zinc concentrates the Empire ranks second.

Second only to the possession within the Empire of the actual ores themselves is the possession of adequate facilities for treatment, refining, smelting, etc. Along these lines marked advance has been made since the war, and steps have also been taken to secure that marketing arrangements shall be under Empire control; this should secure that the movements of these essential commodities are during peace those most likely to be required in the event of war. The Imperial Economic Committee is, on the recommendation of the Imperial Conference of 1930, to undertake a survey of the mineral resources of the Empire.

In respect of another class of minerals not dealt with above, the Empire is strikingly deficient—the minerals which form the basis of fertilizers, nitrates, potash and phosphates. Synthetic nitrates are now produced in large quantities by Imperial Chemicals, Ltd., at Billingham, and in addition Great Britain is a large producer of basic slag, a by-product of steel-making. Natural phosphates are produced in Nauru, Christmas and Ocean Islands, where large deposits are known to exist. It is also believed that immense quantities of natural salts could be produced from the Dead Sea.

In comparison with other countries, the Empire is undermanned so long as the general view is held that upon the white members of the Commonwealth the burden of active defence is to fall. Some nations already recruit non-white peoples and would expect them to serve in any continental war.

Estimating the population of the Commonwealth at 450,000,000 persons, the ratio of white to non-white is roughly 1 to 8; the ratio of the whites outside Great Britain to those in Great Britain is about the same. This main concentration of the available white strength in Great Britain means that the rest of the Empire is garrisoned by a mere handful.

During the General War 6,233,087 men from Great Britain undertook combatant service, while approximately one and a third million from India served in a combatant or non-combatant occupation.

In addition to the bearing of the main share of the burden of active defence, a study of the sources whence many of the raw materials are drawn will show that the white peoples are also responsible in no small degree for the production of essential supplies as they are in addition responsible for their manufacture, either as actual workers or in control of non-white labour.

The general situation in regard to industry must be considered satisfactory, if it is remembered that the demands both of Great Britain and her allies for warlike material were more than amply met; that even during the war years the average needs of the civil population were more adequately filled in this country than in any other of the warring nations, except the United States; that at the same time exports of manufactured articles continued to be sent to neutral nations to help support the exchanges. War experience also showed that, while there was ample room for technical improvement, British industry, though subjected to large-scale dilution, possessed sufficient resources of very highly skilled labour to support the general structure of industry as a whole.

In regard to the essential sea transport, the position is satisfactory save that since the war most nations, in particular the United States, recognizing the value of a mercantile marine, have attempted to build up their own merchant fleets by means of discriminatory tariffs, etc., and by the establishment of their own national building yards. This has caused considerable depression in the most important of all British industries, and several firms have been compelled to reduce their ship-building facilities, though in the long run the rationalization of this industry may not seriously impair production in case of need.

The shipping services of Great Britain have during the past five years brought in an average of about £130,000,000 per annum.* During the past five years, British ship-building yards have produced an average of 1,167,000 tons out of a world total of 2,171,000 for steamships, and 298,000 tons out of a total of 817,000 tons for motorships.

The dependence of western armies and of the industrial organization which supports them upon land transport is well known. Indeed, it would be true to say that modern armies are the direct result of the revolution in transport which was begun by the railways and has been continued by the motor car. Though there are approximately 150,000 miles of railway in operation within the Empire, an average of one mile per 3,000 of population, it is probable that railway development will not now proceed at so rapid a rate by reason of the progress of the internal-combustion engine. In 1907 12,000 motor vehicles were manufactured, in 1927 250,000, and in 1928 300,000 commercial vehicles alone of all types were operating in the United Kingdom. Motor transport is of immense assistance to the community and of great strength to a Government, as it enables both to be independent in case of an organized railway strike. Railways, too, require many "key" men, while anyone can be taught to drive a car

* See footnote, p. 100.

within a few days and thereafter the roads of the country are at his disposal. Motor cars are, relative to railway engines and trucks, cheap and rapid in production, and now that manufacturing practice is largely standardized, repair work is less often required and calls for decreasing skill on the part of operatives. The use of motor traction in the development of poor and backward countries is likely to show marked increases especially when the cheaper compression-ignition type of engine with low running costs is further developed. In this respect the Empire is not especially favourably placed owing to the shortage of supplies of petrol, notably in the African territories, the development of which is largely a question of transport.

In respect of finance it is more difficult to reach definite conclusion or to present a balanced statement, since in the long run the credit of the country rests in the final issue upon the various factors that have been enumerated above. It may be said, however, that apart from the first shock of the war and the necessary dislocation of the financial machinery following the closing of the national frontiers and the cessation of the ordinary means of settling indebtedness, the financial strength of England was equal to the strain.* Since the war large-scale amalgamations and rationalization have taken place, and the banking system has been grouped into five great corporations which work in the closest touch with the Bank of England, which, though a private bank earning dividends for its shareholders, is in fact the bank of the Government and has behind it all the resources of the entire Commonwealth.

The quotation at the head of this chapter suggests that the question of supplies is only a degree more important than is the skill shown in the industrial organization which employs them. Government control over industry has always appeared in some form in every war. It was only in the last that it assumed complete control, set up an organization which covered up to four-fifths of the activities of the population, and regulated the entirety of their supply of the necessities of life.

Early experiences in the war quickly showed that in respect of military supplies the old machinery was inadequate, and the importance of proper organization was stressed in a report presented by the then Director of Army Contracts: "The war is a war of organization, in which the raising of men is one very important item. It is equally important that they should be equipped, clothed, fed and provided with guns, arms and ammunition. For the provision of these necessities, industry, and industry alone, has to be relied upon, and the rapidity and effectiveness with which industry can be organized to meet the emergency cannot but have an enormous influence upon the issue of the struggle."

* See Fayle Sea-borne Trade Vol. I. for a full account.

Though one of the most valuable characteristics of the Englishman is his adaptability and his skill in making the unworkable work, and though consequently it might be a mistake to substitute for this quality a rigid bureaucratic system, yet it would be impossible to deny that the entire energies of the nation could hardly have been directed exclusively upon war production without the setting up of a national organization. The extent of this organization and the wide field of its activities may be best appreciated from the chart which sets out the entire system of control :—

NATIONAL ORGANIZATION OF WAR CONTROL.

WAR CABINET, WAR PRIORITIES COMMITTEE.

1. Ministry of Munitions :
 - Iron and Steel Industry.
 - Non-ferrous Metals.
 - Machinery.
 - Explosives and Chemicals, Fertilizers.
 - Mechanical Transport.
 - Glass Manufacturers.
 - Mineral Oil.
2. Ministry of Food :
 - Wheat Commission (cereals, pulse, etc.).
 - Sugar Commission.
 - Meat and Animal Fats.
 - Dairy Produce.
 - Oils and Fats.
 - Industry (margarine, soap, feeding stuffs, etc.).
 - Fruit and Vegetables.
 - Tea and Coffee.
3. Ministry of Shipping :
 - Shipping Industry.
 - Ship Building.
4. War Office :
 - Woollen and Worsted Industry.
 - Flax, Jute and Hemp Industries.
 - Leather Industries.
 - Boots and Shoes.
5. Board of Trade :
 - Coal Industry.
 - Timber Supply.
 - Cotton Industry.
 - Tobacco and Matches.
 - Paper and Pulp Supplies.
 - Petroleum Executive.
6. Railway Executive.
7. Port and Transit Executive.
8. Canal Control Committee.
9. Liquor Traffic Control Board.
10. War Trade Department (Import and Export Regulations).
11. Food Production Department.
12. Director-General of National Service.

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The economic and political growth of the Dominions makes it clear that in any future war such economic control as was established in Great Britain may require further extension until all the economic resources of the Empire are directed towards one end, and in this connection a resolution of the 1917 Imperial Conference is of considerable importance :—

“The time has arrived when all possible encouragement should be given to the development of imperial resources, and especially to making the Empire independent of other countries in respect of food supplies, raw materials, and essential industries. With these objects in view, this Conference expresses itself in favour of—

“1. The principle that each part of the Empire, having due regard to the interests of our Allies, shall give specially favourable treatment and facilities to the produce and manufactures of other parts of the Empire.

“2. Arrangements by which intending emigrants from the United Kingdom may be induced to settle in countries under the British flag.

“Having regard to the experience obtained in the present war, this Conference records its opinion that the safety of the Empire and the necessary development of its component parts require prompt and attentive consideration, as well as concerted action, with regard to the following matters :—

- (a) The production of an adequate food supply and arrangements for its transportation when and where required, under any conditions that may be reasonably anticipated.
- (b) The control of natural resources available within the Empire, especially those that are of an essential character for necessary national purposes whether in peace or in war.
- (c) The economical utilization of such national resources through processes of manufacture carried on within the Empire.”

Following upon this resolution, considerable steps have been taken with the view to securing imperial co-operation in many important spheres of economic activity.

The work of the Imperial Shipping Board is thus described by Professor L. C. A. Knowles :—

“It is an advisory committee on shipping set up, officially, as a result of the strong recommendations of the Dominions Commission as to the importance of the development of more

rapid and more efficient inter-Empire shipping facilities. The Imperial Shipping Board began its work in 1920, and its importance lies in the fact that it reports not merely to the Prime Minister of Great Britain, but to all the Governments of the Empire. It is subject to no one part of the Empire, and to no one Parliament. It investigates imperial shipping grievances, settles inter-imperial shipping disputes such as that about the deferred rebates, and it has initiated common action in the matter of liability for pilferage under bills of lading within the Empire. It has devised plans for more rapid communications between Australia and England by a combination of air and steamship services, and it has dealt with the question of the income-tax to be levied on shipping earnings within the Empire. Its decisions have hitherto been unanimous."

An Imperial Economic Committee constituted of members appointed by the several Governments of the Empire deals with subjects submitted to it by agreement among these Governments. It came into being in 1923, and was set up "To consider the possibility of improving the methods of preparing for market and marketing in the United Kingdom the food products of the overseas parts of the Empire with a view to increasing the consumption of such products in the United Kingdom in preference to imports from foreign countries and to promote the interests both of the producer and consumer." In conjunction with the Empire Marketing Board, much has been done to stimulate a preference for Empire goods. Apart altogether from the promotion of inter-imperial trading, the peace-time flow of commodities is here very clearly that most desirable in war. In addition, by placing Dominion stocks upon the Trustee List, the overseas Empire has been enabled to borrow at far cheaper rates than on the open money markets of the world. There has been also considerable imperial co-operation in the organization of such scientific bureaux as those connected with forestry, agriculture, medicine, etc.

One further stage in the economic organization remains to be noticed. While it is certain that under conditions of modern war the control of the resources of the nation require the setting up of complete machinery under the direct supervision and control of the Cabinet and with its individual parts staffed and controlled by experts, it is also desirable that those in control of the defence forces should have adequate knowledge of the broad outlines of the economic situation, especially in regard to man-power, the technical skill, etc., available for purely military purposes, and that the closest possible co-operation should exist in peace time between those who will in war be responsible for the direction of all resources, military and economic, of the entire Commonwealth. This most important co-ordination of the military and

economic factors of defence is secured through the man-power and supply-officer sub-committees of the Committee of Imperial Defence, of which both serving officers and civilian Government officials are members.*

Though the "War Book" has been re-edited in the light of war experience so as to co-ordinate the activities of the Government departments of the Dominions with those in Great Britain, nothing comparable to an Imperial General Economic Staff has been set up, though proposals for an Imperial Economic Secretariat have been put forward at the last Imperial Conference

* Civilian government officers also from time to time attend the course at the Imperial Defence College.

APPENDIX A.

STATEMENT SHOWING AREA, POPULATION, TOTAL EXPORT AND IMPORT TRADE AND TOTAL INTER-IMPERIAL TRADE OF THE UNITED KINGDOM, THE DOMINIONS AND THE DEPENDENT EMPIRE.

THE EMPIRE.				THE UNITED KINGDOM.			
Area ...	12,486,000 square miles.	Area ...	93,990 square miles.				
Population ...	440,677,000.	Population ...	45,433,000.				
Trade : Imports ...	£2,235,441,000	Trade : Imperial Imports ...	£370,315,000				
Exports ...	£1,686,210,000	Imperial Exports ...	£329,500,000				
		Foreign Imports ...	£852,000,000				
		Foreign Exports ...	£382,000,000				
Total ...	£3,941,651,000	Total ...	£1,933,815,000				

	Area. Square Miles.	Population.	IMPORTS FROM		EXPORTS TO		Total Trade.
			United Kingdom.	Other Countries.	United Kingdom.	Other Countries.	
Canada and Newfoundland	3,960,000	9,786,000	£ 39,140,000	£ 194,140,000	£ 85,770,000	£ 170,907,000	£ 489,957,000
Australia ...	2,974,580	6,235,000	67,788,000	98,214,000	47,950,000	81,650,000	293,600,000
New Zealand ...	103,285	1,385,400	21,463,000	23,816,700	36,490,000	10,288,000	91,558,400
South Africa ...	467,450	7,718,000	33,120,000	39,510,000	23,860,000	21,730,000	118,220,000
Irish Free State ...	26,590	2,950,000	47,000,000	13,800,000	42,300,000	1,870,000	104,970,000
British India ...	1,000,000	250,000,000	95,000,000	101,150,000	58,500,000	181,800,000	436,451,000
East Africa...	12,600	1,900,000	5,400,000	13,200,000	3,200,000	13,100,000	34,900,000
West Indies and Bermuda	878,000	9,800,000	9,100,000	10,100,000	5,100,000	200,000	31,500,000
Ceylon and Malaya ...	52,832	1,178,000	22,100,000	125,550,000	32,300,000	124,400,000	304,350,000
Sudan ...	1,008,000	6,550,000	2,300,000	4,000,000	3,800,000	1,250,000	11,350,000
Malta, Cyprus and Aden ...	3,781	594,600	2,200,000	9,500,000	1,070,000	5,630,000	18,400,000
West Africa ...	492,000	18,000,000	20,000,000	11,500,000	11,600,000	19,790,000	62,890,000
Honduras and Br. Guiana	98,078	357,720	1,405,000	1,985,000	1,120,000	2,660,000	7,170,000
Falkland Islands ...	5,618	3,286	407,000	302,500	605,000	3,520,000	4,894,000

APPENDIX B.

TABLE SHOWING THE IMPORTS OF IMPORTANT MINERALS INTO THE UNITED KINGDOM, AND PERCENTAGES FROM EMPIRE AND FOREIGN SOURCES.

<i>Mineral.</i>	<i>Total Imports.</i>		<i>From Empire Sources.</i>	<i>From Foreign Sources.</i>
		<i>Tons.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Antimony	6,250	25	75
Cobalt	175	60	40
Copper (metal)	140,000	8	92
Graphite	14,000	11	89
Lead (pig)	282,000	59	41
Mica	2,900	73	27
Nickel—Ore	13,000	100	—
Nickel—Metal	2,600	56	44
Phosphates	650,000	0·6	99·4
Potassium	193,000	0·3	99·7
Sulphur	113,000	Negligible	100
Tin—Metal	14,000	81	19
Zinc—Metal	160,000	15	85

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CHAPTER V

GREAT BRITAIN AND NORTHERN IRELAND

1. Physical Features.

GREAT BRITAIN consists of England, Scotland, Wales and many smaller islands. Since 1922 Ireland has changed her political status, being divided into two sections—(1) The Irish Free State (capital, Dublin), and (2) Northern Ireland (the six Ulster counties except Cavan, Donegal and Monaghan) (capital, Belfast). Both these divisions enjoy Dominion status. Northern Ireland, however, sends thirteen members to the Imperial Parliament at Westminster. The total area, Ireland excluded, is approximately 90,000 square miles.

Great Britain occupies a position off the north-west of the European Continent, of which it was once a part.

The group of islands are of the continental type, the original coast-line of the European Continent probably terminating some 120 miles to the west of Scotland and Ireland; in consequence the seas surrounding these islands are very shallow, about 600 ft., a fact of great importance in providing excellent harbours and the finest fishing grounds in the world.

The coast-lines, especially to the westward, are much indented, providing many first-class harbours. The country is long and, except in the south, narrow, so that nowhere is any place more than about seventy to eighty miles from the sea.

The general physical features of the country are so well known as to require only a passing reference. In general terms a central core runs roughly north—south. To the east of this central core and facing the Continent the land is generally flat, while to the west it is broken and hilly.

The broad effects of these features have been considerable. To the west of the Pennine Range the full effect of the Gulf Stream is felt, while to the east the climate is much drier. The rivers, while numerous, are not of great value as waterways, being naturally very short. Most of the chief ports of the country are, however, found in the estuaries of the rivers.

2. Resources

Population.

The estimated population of the United Kingdom (excluding Ireland) in 1929 was 44,504,000, being 39,607,000 for England and Wales and 4,897,000 for Scotland.

Agriculture.

Agriculture employs approximately 825,000 persons. Nearly three-quarters of the total land of the country is utilized as arable or permanent pasture land. Recent years have seen a decline in the amount of land under wheat cultivation and the rise in the acreage under permanent pasture. The total value of the agricultural output is about £275,000,000.

Minerals.

(a) COAL.—The presence of high-grade coal widely distributed throughout Great Britain has provided the basis upon which has been built up her predominant position as a great industrial nation and makes her the leading partner in the Commonwealth. The distribution of the principal coal areas should be noted on the map in Chapter IV. Reference is also made to these areas and the industries based upon them in Chapter IV.

Dr. Jevons calculates that the coal reserves of Great Britain total 194,355 millions of tons. The average yearly output may be calculated at 250 million tons, of which 170 million tons is used at home and the balance shipped abroad.

(b) WATER-POWER.—A Board of Trade Report in 1921 estimated that approximately 210,000 kw. could be economically generated by the use of water-power. This is the equivalent of the power produced by three million tons of coal. The principal sources of water-power are to be found in Scotland, Wales and Cumberland.

(c) SHALE.—No accurate figures are available of the supplies of shale for the production of oil. Large areas of shale are known to exist in Dorset, Somerset, Norfolk, Lincolnshire, Midlothian, Lanark and Linlithgowshire. Reserves of shale in Scotland alone are estimated to be 600 million tons.

(d) IRON ORE.—The average yearly production of iron ore is approximately 11 million tons. Spain and Algeria supply the greater amount of imported iron ore smelted in Great Britain. An insignificant quantity is exported.

(e) TIN, LEAD, ZINC.—Small quantities are produced in various localities.

Resources of Industry.

It will have been noticed that the only raw material of importance produced is coal. This commodity is extremely bulky and difficult to handle, and it has therefore resulted that other raw materials have gravitated towards coal, the principal industries being centred round the main coal areas. Within recent years this practice has not been followed among the newer industries,

which tend to move southwards and draw their sources of power mainly from electricity.

IRON AND STEEL.—Total production in 1929 was as follows :—

Pig iron	7,701,000 tons.
Steel	9,810,000 „

Iron ore produced in and imported into the United Kingdom during the year 1928 was—

Produced in the United Kingdom	11,261,873 tons.
Imported into the United Kingdom	4,439,885 „

During this period 132 blast furnaces were in operation for the production of pig iron and 94 works in operation for the production of steel. The two industries are mainly concentrated as shown below :—

<i>Principal Centre.</i>	<i>Coal Area.</i>
Newcastle	Northumberland and Durham.
Sheffield	Yorkshire.
Birmingham	South Staffordshire.
Swansea and Cardiff (Tinplate) ...	South Wales.
Glasgow	Lanark and Clydeside.
Middlesbrough	—

Practically no pig iron and about 50 per cent. of the steel produced is exported.

GENERAL ENGINEERING—*Electrical Machinery.*—In 1927 electrical machinery imported totalled £6,000,000, while the value of exports was £19,000,000. Great Britain stands first in the world as a producer and exporter of electrical machinery.

General Machinery.—Exports and imports of various types of machinery are as follows :—

	<i>Exports.</i> (£1,000,000)	<i>Imports.</i> (£1,000,000)
Marine, locomotive, etc.	1,260	—
Internal-combustion engines	3,531	—
Textile	11,742	1,354
Machine tools	1,611	1,180

Motor Cars and Chassis.—

	<i>Exports.</i> (Number)	<i>Imports.</i> (Number)
Cars... ..	17,877	19,340
Chassis	17,819	13,359

Aeroplanes and Parts.—Exports value £3,553,000.

Ship Building.—Output of vessels over 100 tons : 1,447.

Rubber Tyres and Tubes.—Exports value £3,743,000 ; imports value £3,127,000.

GENERAL COMMERCE.—The total value of the imports and exports of the United Kingdom for the year 1929 was as follows :—

Imports, £1,220,765,300 ; Exports of British produce, £839,051,150.

The distribution of this trade was as follows :—

	<i>Imports from.</i>				<i>Exports to.</i>
Europe	36·99				30·27
Africa	7·16				12·00
Asia	13·47				23·57
North America	24·18				13·15
South America	9·60				8·93
Australasia... ..	8·60				12·08
	<hr/>				<hr/>
	100				100
	<hr/>				<hr/>

Great Britain holds about 20 per cent. of the total world trade.

Financial Resources.

The wealth of England is mainly derived from the export of manufactured articles and coal and from the services of finance, shipping and insurance. In addition, there is a large annual income derived from investments in foreign or overseas British countries. A rough estimate of the total annual income of Great Britain gives a figure slightly in excess of £2,000,000,000, the average total raised by taxation being approximately £825,000,000. Of the sums so raised, about £355,000,000 is expended upon the service of the National Debt, which amounts to nearly £7,700,000,000, an increase of approximately £7,000,000,000 due to the General War 1914-1918.

Owing to the serious financial disturbances caused by the war, the banking system of the country is now concentrated in five large groups with resources of approximately £2,000,000,000. This has enabled British banking to extend its influence in foreign countries and over the Empire as a whole and done much to retain for London its supremacy as the financial centre of the world. The Bank of England, as the Bank of the Government, working as a private institution maintains the closest co-operation with the five groups. The advantages of such a large-scale system in times of national crises are too obvious to need recapitulation.

3. Communications.

Railways.

Total mileage, 20,396.

Following the disorganization caused by the war, the many independent railway companies were united to form four groups (Great Western Railway, Southern Railway, London and North-Eastern and London, Midland and Scottish). The four groups

carry approximately 2,000,000,000 passengers and about 340,000,000 tons of goods per annum. The railways of the country have, however, suffered considerably from the competition of motor transport and by the largely increased rates of expenditure, which have grown since 1913 by over 100 per cent., while income has increased by only 70 per cent.

Roads.

The total mileage of public roads is approximately 180,000, of which 25,000 are classified Class I and 16,000 Class II.

Canals.

There are about 5,000 miles of canals and canalized rivers. In the utilization of the available waterways Great Britain is behind the nations of the Continent. A Royal Commission in 1909 proposed a unification of the canal system of the country. From a centre in South Staffordshire canals were to run to the Thames (London), to the Mersey (Liverpool), to the Humber (Hull), and to the Severn (Gloucester).

Transport by Air.

In 1924 the various companies operating air transport were amalgamated as Imperial Airways, Limited. The Company receives a Government subsidy spread over a number of years. The total length of British Air routes is 21,300 miles.

The air routes operated are—

London—Paris.
 London—Brussels—Cologne.
 London—Ostend.
 London—Paris—Basle—Zurich.
 London—Le Touquet.
 London—Middle East—India.
 London—Middle East—South Africa.

The growth of air transport may be seen from the following figures :—

<i>Year.</i>	<i>Flights.</i>	<i>Mileage.</i>	<i>Passengers carried.</i>	<i>Cargo. Tons.</i>
1919 ...	467	104,000	870	30
1920-24 ...	3,419	693,000	10,120	248
1925 ...	4,424	862,000	11,193	550
1926 ...	4,777	840,000	16,775	679
1927 ...	4,450	769,000	18,874	593
1928 ...	5,866	1,011,000	27,659	772
1929 ...	6,923	1,386,000	29,312	938

4. The Defence Forces of Great Britain.

As has been shown elsewhere, the Committee of Imperial Defence is responsible for the co-ordination of naval, military and air power. It also serves to correlate this policy with general foreign policy through one of its standing sub-committees on which the Foreign Office and the Treasury are represented. Man-power and supplies are also handled by other permanent sub-committees of the Committee of Imperial Defence.

The Army.

The land forces of the United Kingdom consist of the Regular Army, Territorial Army and the Reserve Forces.

The Regular Army is recruited by voluntary enlistment, usually for a period of twelve years, with extension in approved cases to the maximum of twenty-one years. Normally service is for seven years with the colours and five with the Reserve.

Under the Cardwell, or linked battalion system, one battalion is overseas while the second is borne on the Home Establishment. This system, however, and the maintenance of a territorial connection for recruiting purposes, shows signs of breaking down.

Considerable progress has been made in the process of mechanizing the army. For purposes of training, fighting troops are organized in divisions of three brigades with divisional artillery, engineers and auxiliary units.

The Territorial Army, recruited by voluntary enlistment, is organized on the same divisional basis for training purposes.

The Reserve Forces are composed of Army Reserve, the Supplementary Reserve of Officers, and the Supplementary Reserve.

For purposes of command, Great Britain is divided up into six commands and the London and Northern Ireland Districts. Normally there are two regular divisions in the Aldershot and one each in the Eastern, Southern and Western Commands.

The Navy.

The British Navy is a permanent establishment governed by the Board of Admiralty. The duties of the Admiralty are grouped under the two headings of Operations and Maintenance. The First Sea Lord and Chief of the Naval Staff, the Deputy Chief of the Naval Staff, and the Assistant Chief of the Naval Staff have charge and direction of the Operations Division. This Division is concerned with naval policy and the general direction of operations, war operations in Home waters and elsewhere, strategy, tactics, the development and use of material, including types of vessels and weapons, and with trade protection and anti-submarine considerations. The four officials who are in charge of the Maintenance Division are the Second Sea

Lord and Chief of the Personnel, the Third Sea Lord and Controller of the Navy, the Fourth Sea Lord and Chief of Supplies and Transport, and the Civil Lord. The Parliamentary Secretary and the Permanent Secretary are concerned with Finance and Admiralty business.

The most important units of the fleet completed to the end of 1929 are as follows, including ships of the Dominions :—

Battleships and Battle Cruisers	...	...	...	20
Cruisers	...	...	...	54
Aircraft Carriers and Tenders...	...	...	...	8
Flotilla Leaders and Destroyers	...	...	...	150
Submarines	...	...	...	53

The British Fleet is distributed at Home and in foreign stations as follows :—

HOME STATIONS.

Battleships	...	...	6 Atlantic Fleet, 4 training.
Battle Cruisers	...	...	4 „ „
Cruisers	...	...	4 „ „ 17 refitting and reserve.
Destroyers	...	...	18 „ „ 63 „ „ „
Submarines	...	...	42 including refitting and reserve.
Aircraft Carriers	...	...	2 Atlantic Fleet, 1 Reserve.

MEDITERRANEAN STATION.

Battleships	...	...	6
Cruisers	...	...	8
Destroyers	...	...	36
Submarines	...	...	7
Aircraft Carriers	...	...	2

FOREIGN STATIONS.

<i>Station.</i>	<i>Cruisers.</i>	<i>Destroyers.</i>	<i>Submarines.</i>	<i>Aircraft Carriers.</i>	<i>Sloops.</i>
America and West Indies	5	—	—	—	2
Africa Station ...	2	—	—	—	4
East Indies ...	3	—	—	—	4
China ...	5	9	5	1	5
New Zealand Navy ...	1	—	—	—	2
R. Canadian Navy ...	—	2	—	—	—
R. Australian Navy ...	3	2	2	—	2

The Royal Air Force.

The Royal Air Force as a separate unit came into existence in 1918, the control being vested in the Air Council. The Air Minister, a Secretary of State, is President of the Council.

The Air Force is composed of Regular Royal Air Force, the Air Force Reserve, the Air Force Special Reserve, the Auxiliary Air Force and the Territorial Air Force.

For purposes of command the Air Force is organized as follows :

United Kingdom : Inland Area, Coastal Area. Irish Wing, Cranwell and Halton.

Overseas : Middle East Area, Mediterranean, Palestine and Transjordanian, Iraq, Aden, India and the Far East.

The establishment at the end of 1929 was 73 squadrons, of which 65 are regular and 8 special reserve or auxiliary Air Force squadrons.

Squadrons borne on Home establishment number 38, 22 are overseas, and 12 are allotted to the Fleet Air Arm. It is proposed that Home Defence squadrons shall ultimately be raised to 52: 39 Regular, 6 Auxiliary A.F., and 7 Special Reserve.

(a) SUMMARY OF ACTUAL CONTRIBUTIONS TOWARDS COMMON-WEALTH DEFENCE, 1929-30.

ARMY.

All Ranks.

Regular Army	(59,987 in India)	206,655
Territorial Army		140,699
Reserve		104,889
Appropriations in money		£32,280,000

NAVY.

Battleships and Battle Cruisers	20
Cruisers	54
Aircraft Carriers	8
Flotilla Leaders and Destroyers	150
Submarines	53
Personnel	94,000
Appropriations in money	£47,312,000

ROYAL AIR FORCE (including Auxiliary Air Force and Cadre Squadrons).

Bombing Squadrons	36
Fighter Squadrons	13
Fleet Air Arm (in 24 Flights)	12
Army Co-operation Squadrons	11
Other types	9
Personnel	32,000
Appropriations in money	£15,983,000

(b) CONTRIBUTIONS DURING THE GENERAL WAR.—During the General War, 1914-1918, 5,594,647 men served in the military forces of the Crown, 528,671 undertook naval service, and 109,769 flying service, a total of 6,233,087.

5. The Defence of the United Kingdom.

Up to the last war the defence of Great Britain rested fundamentally upon the theory implied in the command of the sea. So long as this command remained with Great Britain, the invasion of the country was, short of sudden raids, practically impossible; and, furthermore, it was possible for the land forces of the country to operate overseas.

While this theory is still true in that the loss of the command of the sea would permit of a decisive blow against the headquarters of the Commonwealth and the equally fatal interruption of her sea communications, the dangers of offensive action by aircraft have now become the first danger that the country would have to face in any future war.

Under such circumstances the arrangements made for the defence of Britain may be divided into two main divisions:—

(A) The Sea and Land Forces.

The siting of the principal naval ports and dockyards, and the general disposal of the fleets with a view to the establishment, should occasion require it, of the command of the sea.

The land forces are disposed to provide protection for metropolitan England and for the principal naval ports and dockyards.

The chief naval bases are Chatham, Sheerness, Portsmouth and Devonport, all of which are on the shores of the narrow seas facing the mouth of the Rhine, Cherbourg or Brest.

Woolwich is the principal arsenal, and naval schools are situated at Dartmouth, Portsmouth and Greenwich.

New construction is carried out at the four dockyards as well as at the private ship-building yards on the Clyde and Tyne.

The naval bases were all constructed with a war with France as the most likely occurrence, and consequently the lack of adequate bases in the North of England was acutely felt in the war with Germany. During the war the main fleet was based on Scapa Flow, Rosyth and the Firth of Forth.

For purposes of providing protection to metropolitan England, the Army is concentrated chiefly at Aldershot and Salisbury Plain. The protection of London to the east is provided by Colchester. Regiments of Foot Guards are stationed in London and at Windsor, and cavalry at Hounslow. Woolwich is the headquarters of the Artillery, and Chatham of the Royal Engineers.

(B) The Air Defence of Great Britain.

The air defence of Great Britain is designed mainly with a view to the protection of London.

The question as to whether this may best be carried out by definite measures for defence against raiding machines or by the

provision of an adequate bombing force will be discussed in a later chapter.

The units and formations of the Home Defence Force comprising the Air Defence of Great Britain Command are organized in three groups—(1) The Wessex Bombing Area (Regular Bombing Squadrons); (2) Fighting Area (Regular Fighter Squadrons); and No. 1 Defence Group (Cadre and Auxiliary Squadrons). Headquarters of the Air Defence of Great Britain is at Uxbridge.

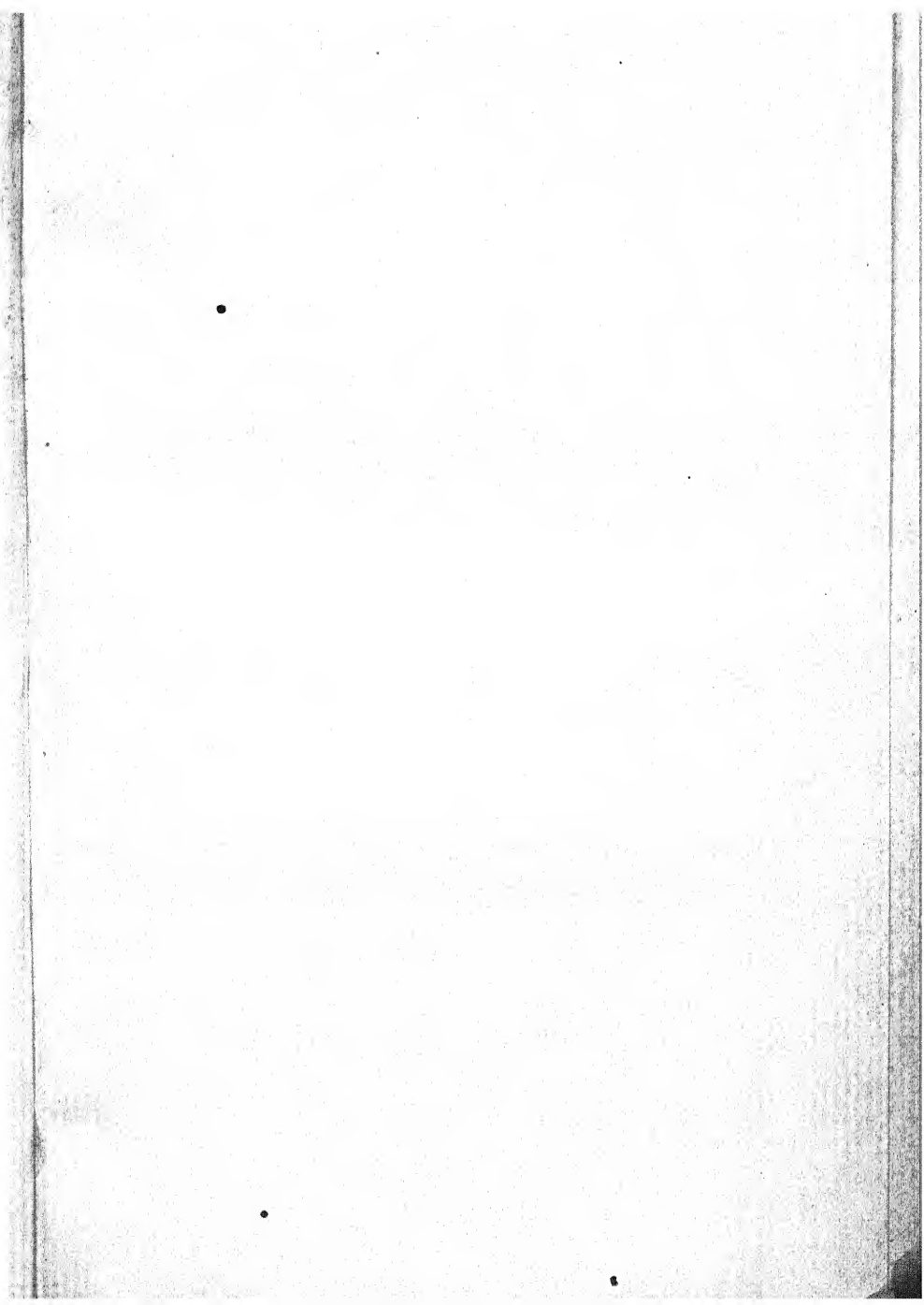
Air Force co-operation with the Army is carried out by No. 22 Group (Headquarters, Farnborough). Coastal Area (Headquarters in London), including units at Calshot, Lee-on-Solent, Gosport, Mountbatten, Donibristle, Leuchars and Felixtowe, is responsible for naval co-operation, units established on carriers in Home waters, etc.

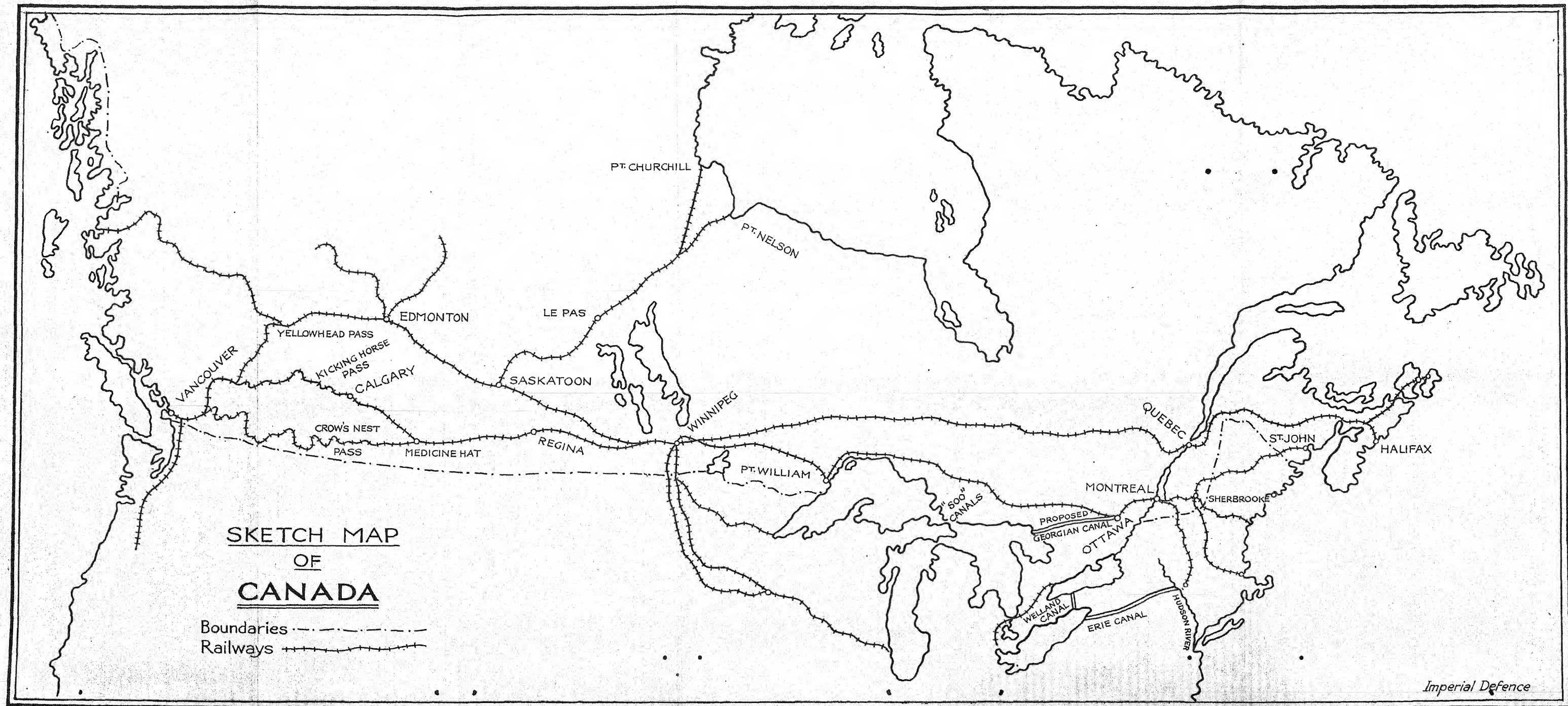
Flying training is carried out by No. 23 Group (Headquarters, Grantham), and technical education at Cranwell, Halton and Manston. Andover is the Royal Air Force Staff College.

Northern Ireland.

Under the Government of Ireland Act, 1920, a separate Parliament and executive Government were established for Northern Ireland (Antrim, Armagh, Down, Fermanagh, Londonderry, Tyrone and the boroughs of Londonderry and Belfast). Northern Ireland also returns thirteen members to the Imperial Parliament at Westminster.

The total area is 3,351,444 acres, and the population 1,256,561. The principal industries, apart from agriculture, are linen and ship-building, both of which are centred in Belfast.





CHAPTER VI

THE DOMINIONS OF CANADA AND NEWFOUNDLAND

1. General Physical Features.

THE physical features of Canada cannot properly be considered apart from the general features of the entire North American Continent, the whole of which comprises some 8,000,000 square miles and is 6,000 miles in length. It falls into three main divisions—

- (1) The Rocky Mountain Range ;
- (2) The Central Plains ;
- (3) The Eastern Highlands.

These divisions have had important results.

(a) The crest of the Rocky Mountain Range is the water-parting of the entire continent, rivers running west of the range into the Pacific or east into the Atlantic or the Arctic Oceans. These great streams have played a notable part in the economic development of the continent as highways, as sources of power, or for irrigation purposes. The streams running into the Atlantic have also pierced the Appalachian Range, thereby assisting land communications between the coast and the interior of the continent.

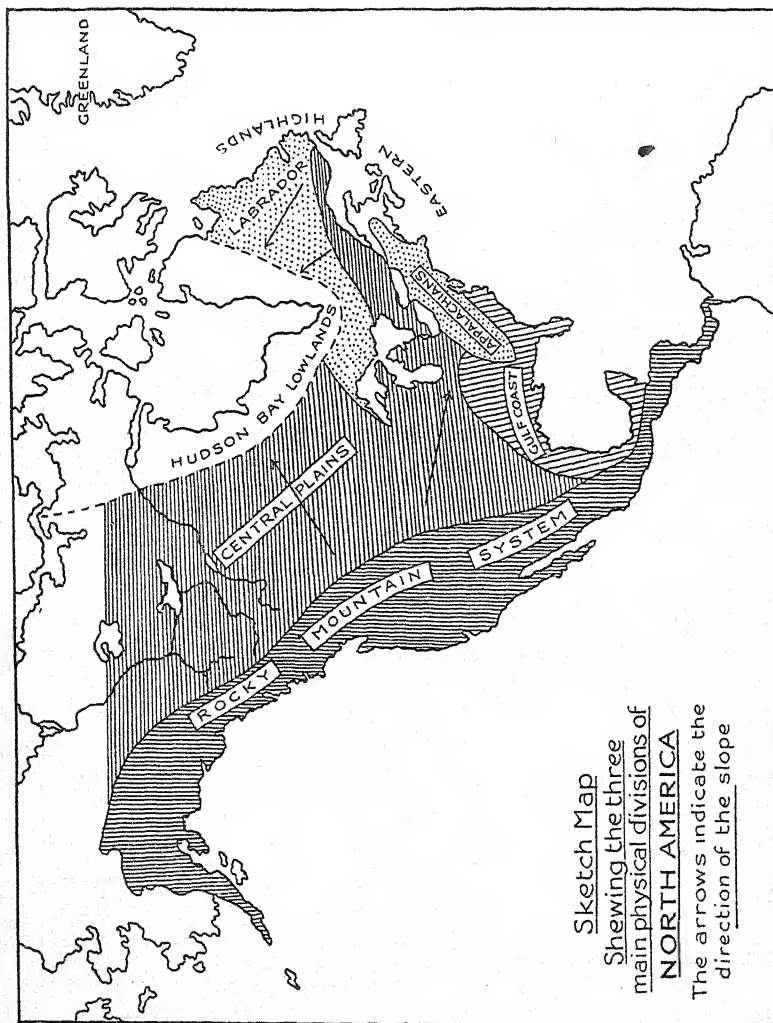
(b) As both the Rockies and the Appalachian Range take a roughly north-south direction, they keep off from the interior the equalizing effects of the oceans which wash the shores of the continent, while at the same time the interior is exposed to the full effects of the Arctic colds in the north, but to the south the equalizing climatic conditions derived from the Gulf of Mexico (Caribbean Break) are experienced.

(c) The Rockies, the Appalachian Range and the older geological formation known as the Laurentian Shield contain some of the most highly mineralized areas in the world.

Boundaries of Canada.

The division which separates the continent into two nations runs roughly along the 49th parallel of latitude. The division is purely a political arrangement and cuts across the general trend of the physical features of the continent.

A study of the map shows that the boundary line starts in New Brunswick, turns north round the salient formed by the State of Maine ; turning south, the line coincides with parallel 45°, joining



the St. Lawrence at the point of intersection of latitude 45° and longitude 75° . The line follows the St. Lawrence and passes down the centre of Lakes Ontario, Erie, Huron and Superior to Fort William. Passing through Rainy Lake and along the line of Rainy River, it reaches Lake of the Woods. The 49th parallel is then followed to the Pacific Coast at Juan de Fuca Strait. The entire length of the boundary line is some 3,000 miles, of which about half is the entirely imaginary and unfortified boundary of the line formed by the 49th parallel.

The boundary between Canada and Alaska is formed by the 140th parallel of longitude.

Canada's boundaries are thus from the 49th parallel to the Arctic and from the Atlantic to the Pacific.

The total area of the Dominion is 3,684,723 square miles, being approximately 100,000 square miles less in extent than the United States and Europe, and some 700,000 square miles greater than Australia. Canada thus comprises about 27 per cent. of the total area of the British Empire.

Of this total, the Yukon and North-West Territories, comprising about 1,500,000 square miles, are as yet largely undeveloped, though a considerable present and a possibly great future may be theirs.

Physical Features of Canada.

Physically, Canada may be separated into three main divisions—

(a) **THE EASTERN DIVISION.**—The Eastern Division is separated from the Western by longitude 97° . This division may be subdivided into the area formed by the line of the St. Lawrence passing through Montreal to Lake Champlain; it is generally hilly, but contains lands suitable for agricultural and pastoral pursuits.

The second sub-division, lying to the south and west, is made up of undulating plains with step-like escarpments. It is generally fertile. This area embraces the region of the great lakes.

(b) **THE WESTERN DIVISION.**—This division runs from the Red River Valley to the Rocky Mountains. Between the Red River and the Rocky Mountains lies the great prairie region. The second section of this Western Division embraces the Rocky Mountains range, which falls to the Pacific coast in a series of gradations and comprises the province of British Columbia.

(c) **THE NORTHERN DIVISION.**—This section consists of about two-thirds of the entire Dominion, and lies approximately north of the 54th parallel and stretches to the Arctic regions. It has an average elevation of 1,000 ft. above sea-level, and is the region

of the great rivers of the Mackenzie and Nelson, and includes the Laurentian Mountain Range.

2. Historical Survey.

The territories now constituting the Dominion of Canada came under British power at various times and by various means. In 1763, by cession of the French, Canada and its dependencies passed finally to the Crown.

Though Canada settled down readily enough under British rule, the presence of a large French body, strongly imbued with French feudal customs, presented a problem, the necessity for a solution of which was as urgent as it was difficult. The Canadians could be forcibly Anglicized or allowed to retain the principal characteristics of their former mode of living and religious beliefs. In 1774 they were permitted to retain their seigniorial system of land tenure and to practise their Roman Catholic faith. Civil law practice was also retained, but English criminal law procedure was substituted for the French.

Following the American War of Independence, a large body, the United Empire Loyalists, who had remained loyal to Britain, were settled in various parts of Canada. These new settlers, though loyal, were strong believers in the right of the colonies to govern themselves. The Constitution Act of 1791 endeavoured to accede to this wish. Into what is now the Province of Ontario, British law was introduced. This part became known as Upper Canada. The rest of the province became Lower Canada, where the old forms permitted by the Quebec Act of 1774 were retained. It was felt, however, that the same form of representative government granted to Upper Canada must be granted to Lower Canada as well.

The new constitution proved a failure from the start. The Upper House or Legislative Council (nominated for life) and the Governor tended to pull one way, and the Lower House or Representative Assembly the other.

For differing reasons both French and British found the existing regime unsupportable, and rebellion broke out in 1837.

In 1839 Lord Durham, who had been sent to Canada as High Commissioner to report upon the state of Canada, issued his report. He found in Lower Canada a struggle of races, French and English, and in Upper Canada a deep resentment against the overbearing conduct and usurpation of power by a small but united body known as the "Family Compact."

The suggested cure for this state of affairs was—

- (a) To absorb the French by the union of Upper and Lower Canada.
- (b) The grant of responsible government.

Contrary to Lord Durham's opinion, the 450,000 English of Upper Canada did not combine with the English in Lower Canada against the French. The English finally divided among themselves and three political parties were formed, the French retaining their influence by allying themselves with the party with which they could drive the best bargain. It was clear from the outset that both English and French must make sacrifices if the union was to be successful.

Thanks to the moderation of Alexander Mackenzie and Jacques Cartier, the necessary sacrifices on each side were effected, and the problem of the mistrust and misunderstanding between Lower and Upper Canada found its solution in the greater Federal settlement of the whole Dominion. The British North America Act of 1867 gave legal effect to the union.

The question of "responsibility," being a clear-cut issue, was more easily solved. Lord Elgin, the then Governor-General, held himself bound to accept the advice of his Canadian ministers, and did so in the face of strenuous opposition on the question of the payment of compensation to those who had lost property in the rebellion, though he at the same time specifically maintained his right to veto or to refer to the Colonial Office any measures which he considered contrary to the interests of the Empire as a whole.

The repeal of the Corn Laws struck a heavy blow at the agricultural community, and a considerable body of responsible persons advocated union with the U.S.A. The repeal of the navigation laws enabling Canada to trade with the world, and the signing of a reciprocity treaty in 1854 with the U.S.A., enabled the farmers, lumbermen and fishermen of each nation to trade freely. In 1866 this Treaty was by mutual consent repealed, and, though a similar proposal for reciprocity was made in 1911, it was rejected by the growing consciousness of Canada's national status.

In 1869 the territories stretching from Lake of the Woods to the Rockies and from latitude 45° to the Arctic had been the property of the Hudson Bay Company. Out of this vast territory the provinces of Manitoba, Saskatchewan and Alberta, North-West Territory and Yukon, were ultimately created, and the future of Canada was assured.

The completion of the trans-continental railway in 1886 brought British Columbia into the Federation and gave Canada a frontage upon the Pacific.

In 1879 the Canadian Government imposed a 30 per cent. tax upon all imported manufactured goods. This was designed to protect Canada's manufactures from undue competition and to secure that differentiation of industries which is clearly necessary to national greatness.

The years since 1895 have witnessed a continuous increase in prosperity and the growth of the national consciousness which may be said to have reached its fullest realization after the General War.

Canada as a separate nation signed the peace treaties at Versailles and is a separate unit in the Assembly of the League of Nations.

3. Political Sub-Divisions.

(A) Prince Edward Island.

Capital, Charlotte Town. Population 88,615.

The province of Prince Edward Island lies at the south of the Gulf of St. Lawrence and is separated from the mainland by Northumberland Strait.

The total area of 2,184 square miles is composed of rich and fertile soil suitable for agricultural pursuits, of which the production of oats and potatoes are the most important. The many harbours provide facilities for fishing, the canning industry being of considerable importance.

(B) Nova Scotia and Cape Breton Island.

Capital, Halifax. Population 523,837.

The province of Nova Scotia, 21,428 square miles in extent and 386 miles long by about 50 miles wide, is joined to New Brunswick by Chignecto Isthmus.

It is divided into two principal divisions by a mountain ridge running through the centre, the Atlantic slope being rocky and barren through exposure to the Atlantic storms; the other, facing Fundy Bay, being fertile and sheltered, is suitable for agriculture. Many excellent harbours, in particular Halifax, are found on the Atlantic slope.

(C) New Brunswick.

Capital, Fredericton. Population 387,876.

The province of New Brunswick, comprising 27,985 square miles, is situated on the mainland, and is bounded on the east by the Gulf of St. Lawrence and Northumberland Strait, and by the Bay of Fundy to the south. The province is generally broken up by hills and valleys, and the soil is fertile, though in large part not under cultivation. Large tracts of timber exist.

(D) Quebec.

Capital, Quebec. Population 2,361,199.

The province of Quebec, comprising 594,434 square miles, extends from the St. Lawrence to Labrador and Hudson Strait.

General farming is carried on along the shore of the St. Lawrence, and the mineral resources, particularly asbestos, copper and gold, are believed to be very great. Northward are areas of timber which provide the raw material for the paper and pulp industries, for which the rivers provide the necessary power.

(E) Ontario.

• Capital, Toronto. Population 2,933,662.

The province of Ontario lies between the great lakes and Hudson Bay on the north and south and between Quebec and Manitoba east and west. The area is 407,260 square miles.

Ontario contains the principal industrial areas of the Dominion, due in the main to the supply of electric power and the presence of large mineral deposits, notably in the Porcupine and Cobalt districts, and the proximity of the coal areas of Pennsylvania (U.S.A.).

Lumbering, agriculture and fur trapping are also extensively carried on.

(F) Manitoba.

Capital, Winnipeg. Population 610,118.

The most easterly of the three prairie provinces, the area of Manitoba comprises 251,832 square miles. Wheat growing and general farming are carried on in the southern areas of the province. To the north considerable forest areas are found, while it is believed that large mineral deposits exist similar to those of the provinces of Quebec and Ontario.

(G) Saskatchewan.

Capital, Regina. Population 757,510.

The central prairie province of Saskatchewan is 251,700 square miles in extent. Wheat growing is the principal industry, and large timber resources are to be found in the northern areas.

(H) Alberta.

Capital, Edmonton. Population 588,454.

The province of Alberta, lying between Saskatchewan Province and the Rockies, is 255,285 square miles in area.

Wheat growing is the principal industry. Lumbering is carried on in the northern and western areas of the province. Large coal deposits and petroliferous areas are found in the south-west.

(K) British Columbia.

Capital, Victoria. Population 524,582.

The province of British Columbia, lying between the Rockies and the Pacific Coast, is 355,853 square miles in area.

The province is especially favoured in point of climate and physical features. Agriculture and fruit growing are among the principal industries, and in addition mining, lumbering and fishing are increasing in importance.

As an outlet on the Pacific for the industries of Canada, Vancouver is one of the principal ports of the Empire.

(L) Yukon and North-West Territories.

Population 12,145.

The total area of these territories is 1,516,258 square miles, and, though much is uninhabited and unexplored, they possess considerable actual economic value both in respect of their agricultural and mineral production and immense timber resources.

4. Constitution and Government.

The British North America Act of 1867 (30 Vic., c. 3) provided for the setting up of a constitution for Canada upon the British model, the Dominion Parliament being composed of the King, represented by the Governor-General, the Senate and the House of Commons.

The Governor-General is appointed by the King as his representative in Canada, and his position, clearly determined by the terms of his commission, may be said to correspond exactly to that of His Majesty in Great Britain. The Governor-General no longer acts as the medium of communication between the Canadian and British Governments, and direct communication between the two Governments has been carried on since July 1st, 1927.

The Senate, composed of 96 members, appointed by the Governor-General-in-Council for life, corresponds roughly to the House of Lords. The number of senators to represent each province was originally fixed by the North America Act, but the subsequent creation of new provinces has increased their number, such increases being dependent upon the growth of population of the newly created provinces.

The House of Commons, comprising 245 members, is elected by the people. From the party claiming a majority of the House, a Cabinet is formed, and the Cabinet, as in England, remains in power so long as it enjoys the support of a parliamentary majority.

In addition to the Dominion or National Government, there is also a Provincial Government, the representative of the King being a Lieutenant-Governor. Except in Quebec the legislature consists of a single chamber.

Canada is represented abroad as follows :—

(a) By the High Commissioner for Canada in Great Britain, acting as the representative and agent of Canada in respect of all matters connected with immigration into Canada from Great Britain, and to take charge of the commercial and financial interests of Canada.

(b) Canadian Ministers also represent Canadian interests at Washington, Paris and Tokyo. Canada maintains, in addition, an advisory officer as her representative accredited to the League of Nations at Geneva.

(c) Provincial Agents-General for Nova Scotia, Quebec, Ontario and British Columbia represent these provinces in London.

5. Resources.

Population.

The figures at the last decennial census in 1921 gave the population of Canada as being 8,788,482, and the estimated population in 1928 was 9,658,000. During fifty years 1871-1921 the population of Canada increased by nearly 140 per cent. This population is composed as follows :—

British	...	...	...	...	32 per cent.
French	...	...	...	...	25 „
Other European	...	...	...	...	20 „
Asiatics, Indians	...	...	...	...	3 „

Despite the rapid growth of the Canadian population, particularly during the twentieth century, the ratio of population to area is only 2.41 per square mile.

Industries.

AGRICULTURAL.—*Wheat* :—

					<i>Bushels.</i>
Total production	...	...	...	...	494,000,000
Total exported	...	...	...	...	333,000,000
Exports to U.K.	...	...	...	...	188,000,000
Total exports expressed as percentage of U.K. consumption	...	...	...	...	77

From the point of view of Imperial Defence alone, Canada's most important contribution is wheat. About 70 per cent. of the total Canadian crop is available for export, and would be more than is required for the total consumption of the United

Kingdom. Oats, barley and general dairy produce are also important, and the last named is a rapidly increasing industry. The average value of vegetable foodstuffs of all kinds exported to the United Kingdom is \$307,000,000. About one-third of the population is employed in agricultural operations of all kinds.

FISHERIES.—

Total production	...	...	...	...	\$48,830,000
Total exports...	...	...	...	...	\$35,000,000
Exports to U.K.	...	...	...	...	\$6,185

The fishing industry is one of the oldest of the Canadian industries, the fishing grounds known as the Grand Banks being the largest in the world. Large quantities of fish are caught in the inland lakes. During the last twenty years the salmon fisheries and the canning industry based upon them have made the Pacific fisheries even better known than those of the Atlantic.

Both in extent and in the quality of their products, the Canadian fishing grounds are probably without equal in the world.

The industry employs approximately 63,000 fishermen.

TIMBER.—

Total production	...	...	...	...	\$206,080,000
Total exports	...	...	...	...	\$107,211,000
Exports to U.K.	...	...	...	...	\$9,000,000
Total exports as percentage of U.K. consumption	...	...	...	...	42

The total area of land at present under forest is estimated to be slightly in excess of 1,000,000 square miles, about 25 per cent. of which is calculated to be commercially unprofitable.

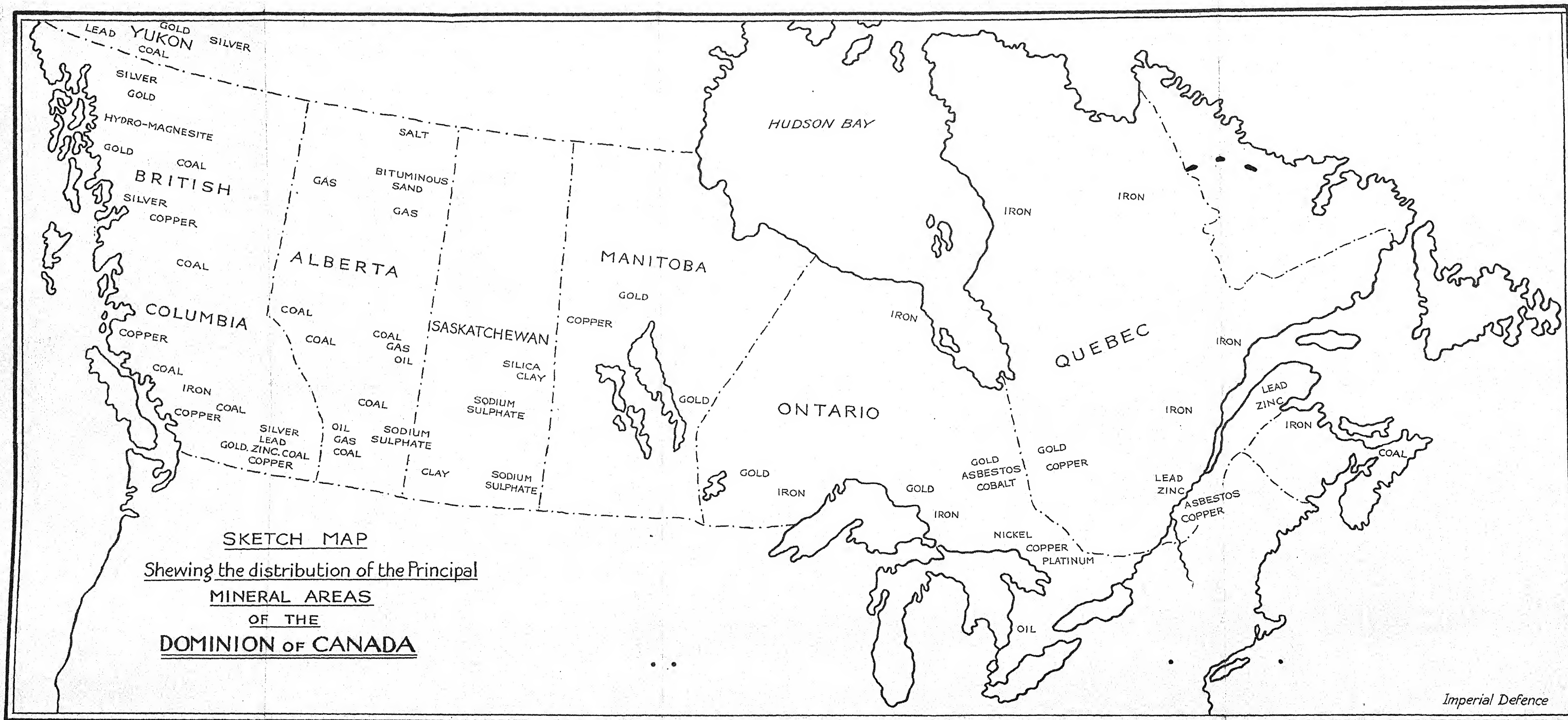
The principal forest areas, most of which are Dominion property, are in the provinces of British Columbia, Ontario, Quebec, New Brunswick and Nova Scotia.

Though of comparatively recent development in Canada, the production of pulp and paper is now of first-class importance, this development being due to the abundance of water-power in close proximity to forest resources of pulpwood species. The value of pulp and paper exported annually is about 47 and 129 million dollars.

Minerals.

The Dominion of Canada, both actually and potentially, is one of the greatest mineral-producing countries in the world.

The total value of mineral production in 1928 was about \$54,000,000, an increase over the 1921 figures of 60 per cent. Development in the past was slow owing to lack of adequate



transport facilities for surveying, etc., but these difficulties have been largely overcome by the use of the aeroplane both as a means of travel and for photographic survey work.

The principal metalliferous areas so far as is at present known are found in Ontario, British Columbia, Nova Scotia and Alberta in the order named as regards value of output, but minerals are won in practically every province.

The principal mineral products are set out below. Column 1 gives the average of production for the four years 1925-1928, and Column 2 the export figures for 1928.*

Mineral.	(1) Total Production.	(2) EXPORTS.		(3) Total Exports as Percentage of U.K. Con- sumption.
		Total.	To U.K.	
Gold ...	\$39,000,000	\$9,035,000	\$1,104	—
Copper ...	1,309,000 cwts.	749,000 cwts.	235,000 cwts.	24
Lead ...	2,640,000 cwts.	2,416,093 cwts.	970,257 cwts.	43
Nickel ...	676,786 cwts.	367,332 cwts.	316,073 cwts.	153
Silver ...	21,500,000 ozs.	15,906,738 ozs.	24,903 ozs.	27
Asbestos	275,184 tons	129,402 tons	11,064 tons	300
Zinc ...	1,361,000 cwts.	1,237,000 cwts.	214,000 cwts.	49
Aluminium	—	532,000 cwts.	40,000 cwts.	29

GOLD.—Gold was first produced about 1850 in British Columbia, the findings of alluvial gold on the Fraser River being the best known. The discoveries on the Bonanza Creek and the Eldorado, tributaries of the Yukon, occasioned two of the most famous gold rushes in history. Gold is also mined in Nova Scotia, Quebec and Manitoba, but the principal areas are the Kirkland Lake and

* Estimated figures *only* for 1929 are available. These are as follows :—

Mineral.	(1) Total Production.	(2) EXPORTS.		(3) Remarks.
		Total.	To U.K.	
Gold ...	\$39,082,000	\$12,396,000	\$21,631	22% increase over 1928.
Copper ...	2,215,000 cwts.	2,073,613 cwts.	214,321 cwts.	
Lead ...	2,910,000 cwts.	2,533,000 cwts.	1,166,000 cwts.	90 % of world production.
Nickel ...	1,000,000 cwts.	405,842 cwts.	273,000 cwts.	
Silver ...	23,000,000 ozs.	14,037,000 ozs.	478,000 ozs.	64.5 % of world production.
Asbestos	306,055 tons	134,062 tons	6,151 tons	
Zinc ...	1,752,000 cwts.	1,275,000 cwts.	271,432 cwts.	—
Aluminium	—	438,000 cwts.	74,700 cwts.	

Porcupine areas in Ontario. Canada now ranks as the third gold-producing country in the world.

COPPER.—Copper is produced principally in the Sudbury area in Ontario. The International Nickel Company has both smelting and refining plants in the Sudbury area, and the Mond Nickel Company products are exported for refining to Swansea, South Wales. The Frood areas are stated to be immensely rich in ore. Canada produces about 4 per cent. of the world's supply of copper.

LEAD.—Lead is produced in Ontario, and recent surveys in the Sudbury area indicate large reserves of lead-zinc ore. The principal lead production of Canada is in British Columbia in the East Kootenay districts.

NICKEL.—Nickel production is confined almost exclusively to the Sudbury area, Ontario, where about 90 per cent. of the world's supply of nickel is produced. Nickel now enters very largely into many manufacturing industries, notably that of automobiles, electrical machinery and submarine cable work.

SILVER.—Silver is produced in British Columbia, the Yukon Territory, and principally in the Cobalt area of Ontario province. Canada's production represents about 9 per cent. of the world's supply.

ASBESTOS.—Asbestos production is concentrated in Quebec province in the Black Lake, Thetford and East Broughton districts. Numerous plants for the manufacture of asbestos building materials, brake and clutch linings and packing materials for steam and hydraulic machinery have been recently erected. The asbestos produced in Canada represents 90 per cent. of the world's supply.

ZINC.—Zinc is found principally in British Columbia in the Kootenay district, and has, due to demands during the war, made rapid advance, particularly since the installation of electrolytic zinc-refining plant in 1915 for the treatment of lead-zinc ores.

ALUMINIUM.—Accurate figures for the production of this metal are not available. Large quantities of alumina and bauxite are imported into Canada from the United States.

Sources of Power.

COAL.—

						<i>Tons.</i>
Total production	...	...	...	...	...	16,145,000
Total imports	...	...	...	...	...	12,500,000
Imports from U.K.	...	...	...	...	...	928,000
Total exports	...	...	...	...	...	1,110,000

Though the reserves of coal in Canada are very great, the annual production is only equivalent to about half the quantity consumed. Coal areas are mainly in Nova Scotia and New Brunswick in the East and in Alberta, Saskatchewan and British Columbia in the west. These areas are far removed from the industrial areas of Ontario and Quebec, to which the supplies in Pennsylvania (U.S.A.) are nearer. Of the annual output much is brown coal, requiring special processes for manufacturing purposes.

The ~~total~~ coal reserves in Canada are estimated to be 1,234,000,000 tons, sufficient for all practical purposes for almost all time, so that the present position whereby nearly 50 per cent. of the total Canadian consumption is imported from a foreign country is anomalous.

HYDRO-ELECTRIC POWER.—The best hard coal in Canada is found in British Columbia, and this fact has led to a rapid development of Canadian hydro-electric power. In 1928, 5,328,000 h.p. was thus produced, equivalent to a saving of some 30,000,000 tons of coal. There is believed to be a reserve of 32,000,000 h.p. of electricity available in Canadian rivers, which, being annually renewable, represents only the utilization of "income" as compared with coal, which represents "capital" expenditure since it is irreplaceable.

PETROLEUM.—The principal area of production is Alberta, which supplies more than 50 per cent. of the total output, the balance coming from Ontario (139,606 barrels) and New Brunswick (18,000 barrels).

The oil industry has made rapid progress in Canada, and in order to secure adequate supplies for use in the Dominion, controlling interests have been established in certain areas in South America, the crude oil from which is refined at Vancouver. Other refineries have been established at Sarnia (Ontario), Montreal (Quebec), Dartmouth (Nova Scotia), near Halifax, Calgary (Alberta), near the well-known Turner Valley oil-fields.*

6. Communications.

To Canada above all countries in the world communications have meant not only political unity, but economic development. The distance from the Atlantic to the Pacific Coast, some 4,000 miles, the paucity of population, and, in addition, the waste

* A recent Press announcement states that oil production on a large scale will shortly be begun by the separation of oil from the bitumen sand areas near Fort McMurray in Northern Alberta. It is believed that this area, over one thousand square miles in extent, is capable of the production of oil on an unprecedented scale. The oil will be separated from the sand by a machine similar to that employed for separating cream from milk. A plant capable of handling 600 tons a day is shortly to be installed.

spaces separating the industrial areas in Ontario and Quebec from the agricultural areas of the prairies, made the construction of some form of inter-oceanic communication essential if the great natural resources of the Dominion were to be made available to her own people and to the world.

Railway communication is expensive, and in consequence there has been a great expansion of the resources of the waterways of Canada. These two main methods of large-scale internal transportation will be briefly considered.

(A) Railways.

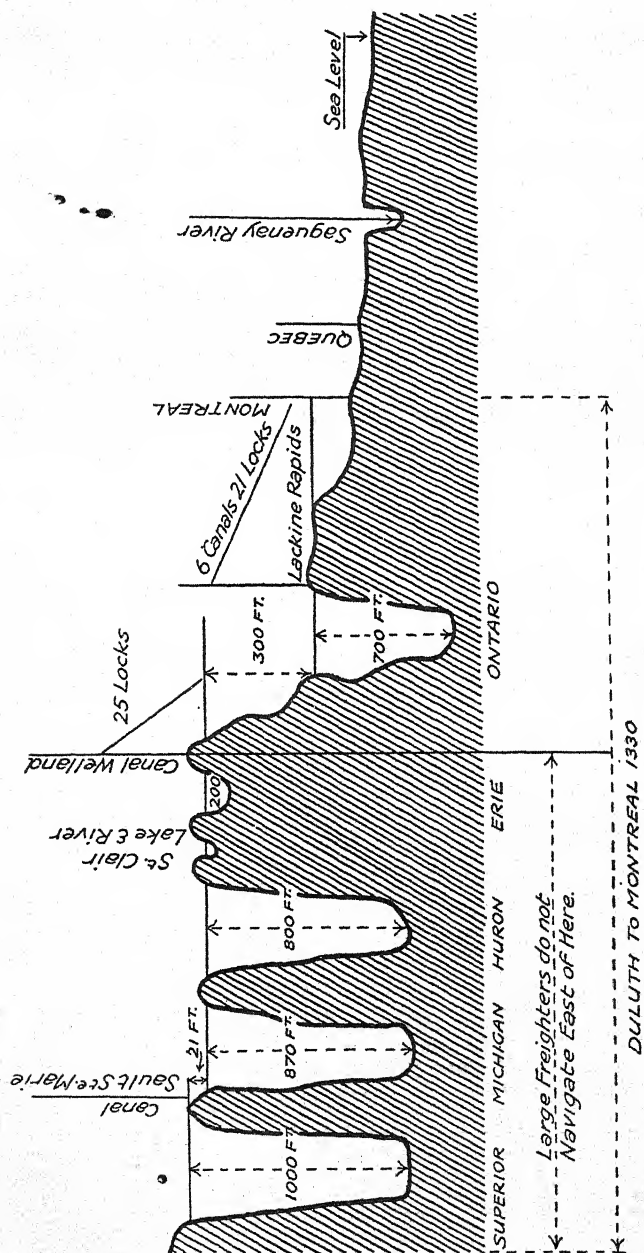
CANADIAN NATIONAL RAILWAYS.—The total single-track mileage is 40,572. The lines built or acquired by the Canadian Government are now consolidated in one system, the Canadian National Railway, covering about one half of the single-track mileage. The main trans-continental line runs on Canadian territory throughout its whole length from Halifax (Nova Scotia) via Quebec, Winnipeg, Saskatoon, Edmonton, crossing the Rocky Mountains at Yellow Head Pass and thence to Prince Rupert.

CANADIAN PACIFIC RAILWAY.—The system of the Canadian Pacific Railway is privately owned and possesses 15,000 miles of track. Its main route is also trans-continental. It leaves St. John (New Brunswick) and, crossing the state of Maine (U.S.A.), enters Quebec province at Megantic, thence via Sherbrooke to Montreal. Passing through Ottawa to Winnipeg and thence to Regina, Medicine Hat and Calgary, it crosses the Rocky Mountains via Kicking Horse Pass and reaches the Pacific at Vancouver.

The line Le Pas—Port Churchill (Hudson Bay) has been projected and the greater part constructed. The advantage of this line is that it would provide a second route (or “back way”) if the “front” and now used route were closed. The line and the provision of the necessary harbour facilities would be costly, but would reduce freight charges on shipments of wheat to Liverpool (Port Churchill to Liverpool, 2,975 miles).

The Hudson Bay is not ice-free all the year round, but it is claimed that routes can be cleared by ice-breakers.

The strategic value of this route is obvious if consideration be given to the possibility of the present routes being severed at Sherbrooke, Montreal or Winnipeg, all of which lie close to the border. Severance of communication at Winnipeg would cut Canada in two. Interruption at Montreal or Sherbrooke would sever Canadian connection with the Atlantic and consequently with Great Britain.



"Longitudinal Section" through the Great Lakes from Duluth to the Sea

(From SEAWAYS & SEA TRADE... A.C. HARDY. By Permission of the Publishers.)

(B) Canals.

Prior to the construction of the railways, the St. Lawrence, the Ottawa River and the Great Lakes, though liable to interruption necessitating considerable delay and expense for portage, were the principal means of transportation.

Although originally constructed for military purposes, the canals now play a predominant part in the economic life of Canada. Though ice-bound from December to May, the canal system carried in 1928 188,000 passengers and 18,720,000 tons of freight over 50 per cent. of which was agricultural produce.

The most important canals on the system and the routes they serve are :—

(1) The Welland Canal, connecting Port Dalhousie, Lake Ontario, to Port Colborne, Lake Erie. This canal is parallel to the Niagara River, which is not navigable. The canal is 26·75 miles in length, with twenty-six locks, having a minimum length of 270 ft., width 50 ft. and depth 14 ft.*

(2) Sault St. Marie Canals, connecting Lake Huron and Lake Superior. These two canals lie one in Canadian and one in American territory. There is only one lock on the Canadian system, having a length of 900 ft., a width of 60 ft. and a depth of 19 ft.

(3) Erie Canal, leaving Lake Erie at Buffalo and passing through United States territory, connects with the Mohawk River and thence via the Hudson to New York.

For many years schemes for connecting the Great Lakes with the Atlantic by means of a ship canal have been under consideration. This would enable ocean-going vessels to pass through direct. The proposed Georgian Bay Canal would, if constructed, link the St. Lawrence with Lake Huron.

The canal would follow the French River from Georgian Bay (Lake Huron) to Nipissing Lake, thence by the Mattawa River to the Ottawa River and through Ottawa to the St. Lawrence at Montreal.

The canal, besides lessening the distance from Fort William to Liverpool, would provide a passage deeply situated in Canadian territory between the industrial and agricultural areas of the Dominion, and would make more assured the indispensable supplies of Canadian wheat for the English market.

* A new canal from Port Wellen, Lake Ontario, to Port Colborne, Lake Erie, is shortly to be completed. This new Welland Canal has eight locks, providing accommodation for vessels up to 450 ft. in length and drawing 18 ft. of water. The canal has a total length of twenty-five miles.

(C) Communications by Air.

The development of flying in Canada has been retarded by two factors—

- (a) The relatively small populations of the principal cities ;
- (b) The fact that the country already possesses means of communication by water and by rail entirely adequate to its needs.

The greatest development has therefore taken place in the North-West Territories, where other systems of transport are not yet in existence.

Aircraft has been especially employed in survey work, mineral exploration, fire fighting, forest patrol and the extermination of agricultural pests.

Since 1927 mail contracts between Montreal, Toronto and New York have been entered into and experimental mail, passenger and freight services arranged between Winnipeg, Calgary and Edmonton and between Montreal, St. John and Halifax.

The mooring mast at St. Hubert, seven miles from Montreal, was put to use for the first time in 1930 by H.M. Airship R100 on her flight to Canada and back.

The air transport for passengers and mails during 1928 was so successful that large-scale developments may be expected, and already types suitable to Canadian conditions have been produced by Vickers (Canada) Limited. The De Havilland Aircraft Company and Armstrong-Siddeley Motors, Limited, have established branches for constructional, assembly and repair services.

7. The Defence Forces of Canada.

The National Defence Act, 1922, provides for a Department of National Defence, presided over by the Minister of Defence.

The Army.

(1) Under the Militia Act of 1906, the military forces of Canada consist of—

- (a) Active permanent militia ;
- (b) Active non-permanent militia ;
- (c) Reserve militia.

The Active Permanent Militia is raised by voluntary enlistment. In addition to the providing for the care and protection of forts, etc., it assists in the training of the Non-permanent Militia. It corresponds to the Regular Army in Great Britain. The Non-permanent Militia corresponds to the Territorial Army.

Every male between the ages of eighteen and sixty is liable to service in the Militia. The Militia is liable for service in Canada and beyond Canada for the defence of the Empire.

(2) ESTABLISHMENT — *Permanent Active Militia*. — Actual strength less than 4,000 and limited to 10,000.

Non-Permanent Active Militia. — 10,250 officers and 115,129 other ranks.

British War Establishments are adhered to as closely as possible.

(3) COMMAND AND ADMINISTRATION. — All defence forces are under the control of the Ministry of National Defence. The Minister is assisted and advised by a Defence Council.

The Headquarters Staff is divided into—

Branch of the Chief of the General Staff.

„ „ Adjutant-General.

„ „ Quartermaster-General.

„ „ Master-General of Ordnance.

and is situated at Ottawa, and there are eleven military districts.

(4) COMPOSITION AND ORGANIZATION. — (a) The Permanent Active Militia consists of Headquarters Staffs, and fifteen units—Cavalry, Infantry, Artillery, Engineers, Signals, Medical, Veterinary, Ordnance, Supply and Pay Corps.

(b) The Non-permanent Active Militia possesses no higher organization than the brigade. The proportion of the various arms is based on the requirements of a field army.

(5) TRAINING — (a) *Permanent Force*. — Training is continued throughout the year and based upon that of the British Regular Army.

(b) *Non-permanent Active Militia*. — Members are liable for thirty days in any one year. The period, however, is usually about nine days.

(6) MILITARY ESTABLISHMENTS — (a) *The Royal Military College, Kingston*. — Three hundred cadets are trained for permanent commissions in the various branches of the Permanent Active Force and the Royal Canadian Air Force.

(b) *Militia Staff Course*. — To fit officers of the Non-permanent Militia for junior staff appointments.

(c) *Royal Schools of Military Instruction*. — Permanent schools, for every branch of the service, are formed at various centres throughout Canada, for the purpose of giving instruction to personnel of both branches of the Active Militia.

The Royal Canadian Air Force.

(1) CONSTITUTION.—The Royal Canadian Air Force is constituted under the Air Board Act of 1919. All the powers, duties and functions of the Air Board were by the National Defence Act of 1922 transferred to the Ministry of National Defence. These duties comprise—

- (a) The air defence of Canada ;
- (b) ~~Control~~ Control of civil aviation ;
- (c) The conduct of flying operations for the civil departments of the Government.

The Royal Canadian Air Force consists of—

- (i) Permanent Active Air Force for instructional and operational duties.
- (ii) Non-permanent Active Air Force.
- (iii) A Reserve Air Force.

(2) TERMS OF SERVICE.—Terms of service are for three years.

(3) ESTABLISHMENT.—

- (a) Permanent ... 153 officers ; 660 airmen.
- (b) Temporary ... 67 officers ; 130 airmen.

(4) ORGANIZATION.—

Headquarters, R.C.A.F.	R.C.A.F. Station, Camp Borden, Ontario.
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Units :—

No. 1 Squadron (Training)	"	"	"
No. 2 Squadron (Training)	"	"	"
No. 3 Squadron (Service)	"	"	"
R.C.A.F. Stores and Repair Depot, Ground Instructional School	...	"	"	"
No. 4 Squadron (Training) ...	...	R.C.A.F. Station,	Vancouver, B.C.	
No. 5 Squadron (Service) ...	...	"	"	"
R.C.A.F. Communication Flight	...	Ottawa, Ont.		

(5) TRAINING.—Training is carried out at all R.C.A.F. units and consists of—(a) Officers' training, and (b) airmen's training.

Regular Royal Air Force practice is closely adhered to. Officers take the same promotion examinations as those prescribed for Royal Air Force Officers. A limited number of R.C.A.F. officers attend courses of instruction in England, and limited exchanges of officer personnel between R.C.A.F. and R.A.F. are periodically carried out.

The Royal Canadian Navy.

The Royal Canadian Navy, established in 1910, consists of 550 of all ranks of the Permanent Force, 500 Reserve, and 1,000 Naval Volunteer Reserve. One destroyer and two mine-sweepers are based on Halifax, N.S.; one destroyer and two mine-sweepers on Esquimaux, B.C.

Police.

The Royal Canadian North-West Police, organized into eleven divisions and having a strength of 975 all ranks, is an armed body, permanently employed and trained as cavalry. Headquarters are at Ottawa.

SUMMARY OF THE CONTRIBUTION OF CANADA TO THE DEFENCE OF THE COMMONWEALTH.

	<i>Permanent Militia.</i>		<i>Non-permanent Militia.</i>	
	<i>Officers.</i>	<i>Other Ranks.</i>	<i>Officers.</i>	<i>Other Ranks.</i>
(a) Army		3,700	10,250	115,129
(b) Navy ...		550	1,500 reserve.	
	<i>Officers.</i>		<i>Officers.</i>	
	<i>Officers.</i>	<i>Airmen.</i>	<i>Officers.</i>	<i>Airmen.</i>
(c) R.C.A.F.	153	660	67	130

During the course of the General War, 418,000 officers and other ranks served with the Canadian Expeditionary Force.

APPROPRIATIONS IN MONEY.—

Army ...	...	...	...	...	\$11,000,000
Navy ...	...	...	...	...	\$2,725,000
R.C.A.F.	...	...	...	...	\$5,000,000

8. The Defence of Canada.

Any attack upon the Dominion may be considered from two points of view—

- (a) From a Pacific or a European Power;
- (b) From the U.S.A.

The attempt from any quarter to establish a trans-oceanic sovereignty in the Dominion could only follow the decisive defeat of the British Fleet, and would cause the intervention of the United States.

In the event of a war between Great Britain and the United States of America, it appears that little could be done for the defence of the Dominion.

The maintenance of sea communications between Canada and Great Britain would be a matter of difficulty in view of the present parity of the two fleets. Unless reinforced by assistance

from Great Britain, Canada would be unable to resist an attack from an overwhelming weight of numbers, supported by greatly superior industrial resources.

The comparative shallowness of Canada, combined with the fact that the chief centres of population and industry are close to the border, denies to her the advantages of retreat into the interior, since such action must expose her principal cities.

Canada would, therefore, be faced with the necessity of defending her border line in order to cover her chief centres and communications by rail or water.

An attack would have two main aims—

- (a) To attack centres of population, industry and communications;
- (b) To sever Canada's connection by sea with Great Britain.

Disregarding Vancouver, B.C., attacks against Winnipeg, Toronto and Montreal would all achieve the first object. An attack against Montreal would achieve both.

Newfoundland and Labrador.

Newfoundland lies across the entrance to the mouth of the River St. Lawrence.

The country, about 40,000 square miles in area, has a rugged coast line, reaching in the south-west an elevation of 2,000 ft. From this coastal range there spreads out an undulating country, consisting of "barrens" (moss-covered rocks), marshes, lakes and intersecting rivers. Much of the area is heavily timbered.

The population is about a quarter of a million. Fishing, lumbering and mining are the chief occupations.

Resources.

The mineral resources are considerable. Large deposits of high-grade iron ore, of an estimated total of 3,000,000,000 tons, are known to exist, and an increasing industry is being developed. Coal, copper, gold, silver and lead have all been found.

Extensive paper and pulp mills have also been erected.

Strategic Importance to Great Britain.

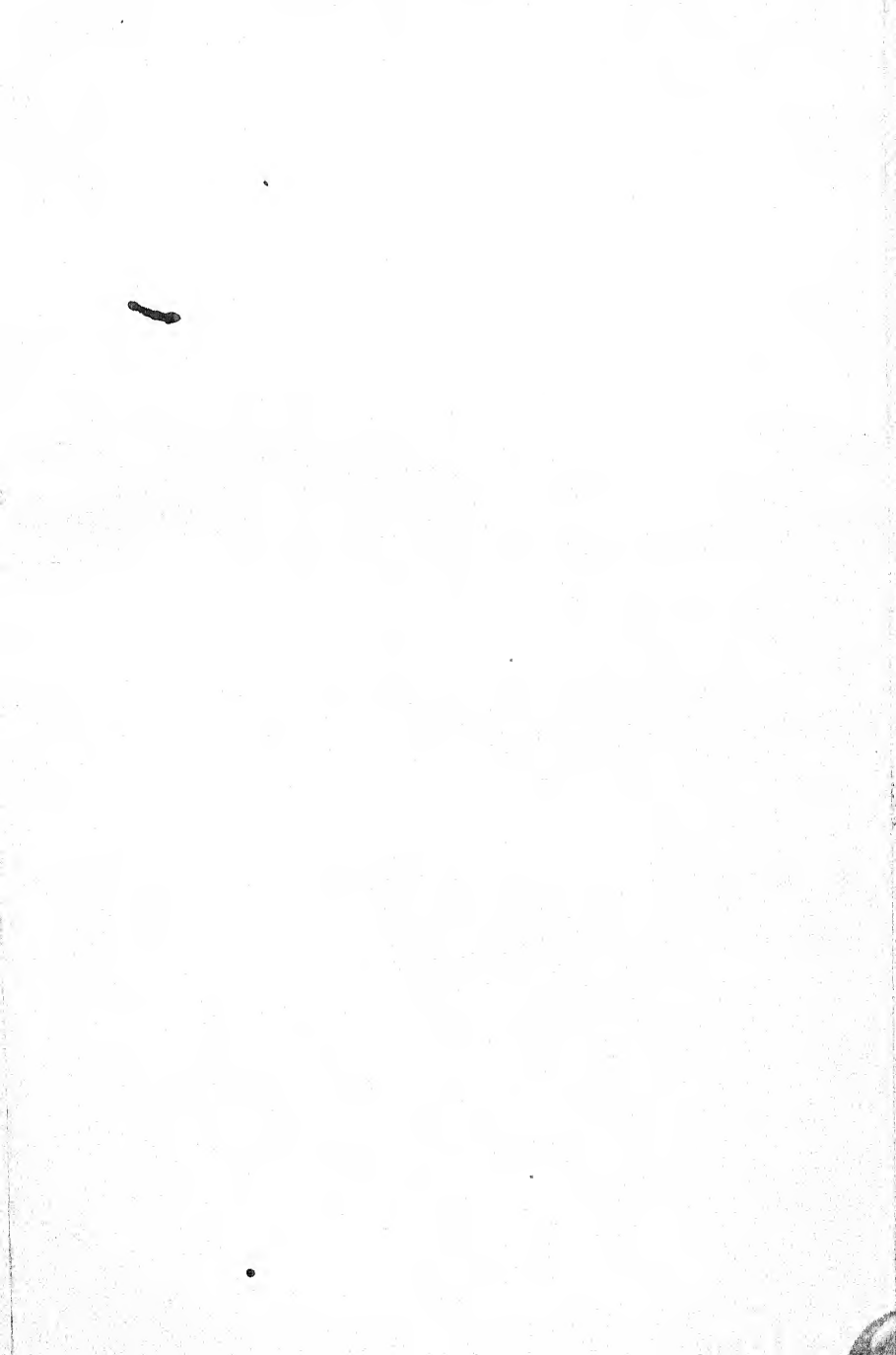
(1) It is closer to Europe than any other part of the continent, and has therefore great importance as a future air port for transatlantic flights, as well as forming a junction for trans-ocean flights to Canada and the U.S.A.

(2) It would provide suitable harbours removed from U.S.A. naval bases.

(3) It is the American terminus of cable communication and wireless.

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CHAPTER VII

THE DOMINION OF AUSTRALIA

1. General Physical Features and Climate.

THE Australian Commonwealth, including the island of Tasmania, lying in the Southern Hemisphere between 113° and 155° E. longitude and between 10° and 43° S. latitude, is at once the largest island and the smallest of the continents of the world, comprising an area of 2,974,581 square miles, thus being twenty-five times as large as Great Britain and Ireland and four-fifths of the size of Canada.

Australia is noticeably compact in shape, possessing a smaller coastline in relation to size than any other continent. The Tropic of Capricorn ($23^{\circ} 30' S.$) cuts through the continent, so that nearly 60 per cent. lies within the temperate zone.

Physical Features.

The general physical features of Australia are simple, comprising three areas :—

- (1) The Eastern Highlands ;
- (2) The Central Lowlands ;
- (3) The Western Plateau.

THE EASTERN HIGHLANDS.—The highest land lies near the East Coast, a narrow coastal plateau rising sharply to form the Australian Alps (Blue Mountains). This range runs practically from north to south of the continent, the highest point being Mount Townsend, 7,000 ft. above sea-level. In general the eastward face of the range is the steepest, and it slopes gently inland towards the central lowlands. The breaks in the range are also of considerable importance, and have had marked effect upon the opening up of the country by offering facilities for railway construction inland from the coast to important areas west of the Alps.

THE CENTRAL LOWLANDS.—From the dividing range the ground falls gradually towards the central plain, which itself faces in a southerly direction, the lowest point being Lake Eyre, which is below the sea-level. The Central Lowlands fall into two principal divisions, the Murray-Darling basin and the Lake Eyre basin.

THE WESTERN PLATEAU.—From the Central Lowlands the levels slowly rise to form the rim of the Western Plateau, which

again falls into the narrow western coastal plain. Southwards the plateau ends abruptly in lofty cliffs between two and three hundred feet in height.

The whole Western Plateau is generally above 600 feet, and occupies approximately 60 per cent. of the total land area of the continent.

The altitudes of the surface of Australia range up to a little over 7,000 ft., and hence the climate embraces many features from the characteristically tropical to the alpine.

On the coast the rainfall is abundant and the atmosphere moist, but in many parts of the interior the rainfall is limited and the atmosphere dry.

The following table indicates the extremes of temperature at nine typical places; it will be observed that on the average the temperatures are equable.

	Latitude (S.)		Longitude (E.)		Max. Min.	
	Deg. Min.		Deg. Min.		° F.	° F.
Perth	31 57	115 50	85 47		
Adelaide	34 56	138 35	87 44		
Brisbane	27 28	153 2	80 48		
Sydney	33 52	151 12	77 45		
Melbourne	37 49	144 58	78 42		
Hobart (Tasmania)	42 53	147 20	72 39		
Darwin	12 28	130 51	94 67		
Daly Waters	16 16	133 23	102 58		
Alice Springs	23 38	133 37	96 37		

The climate may be divided into three main belts :—

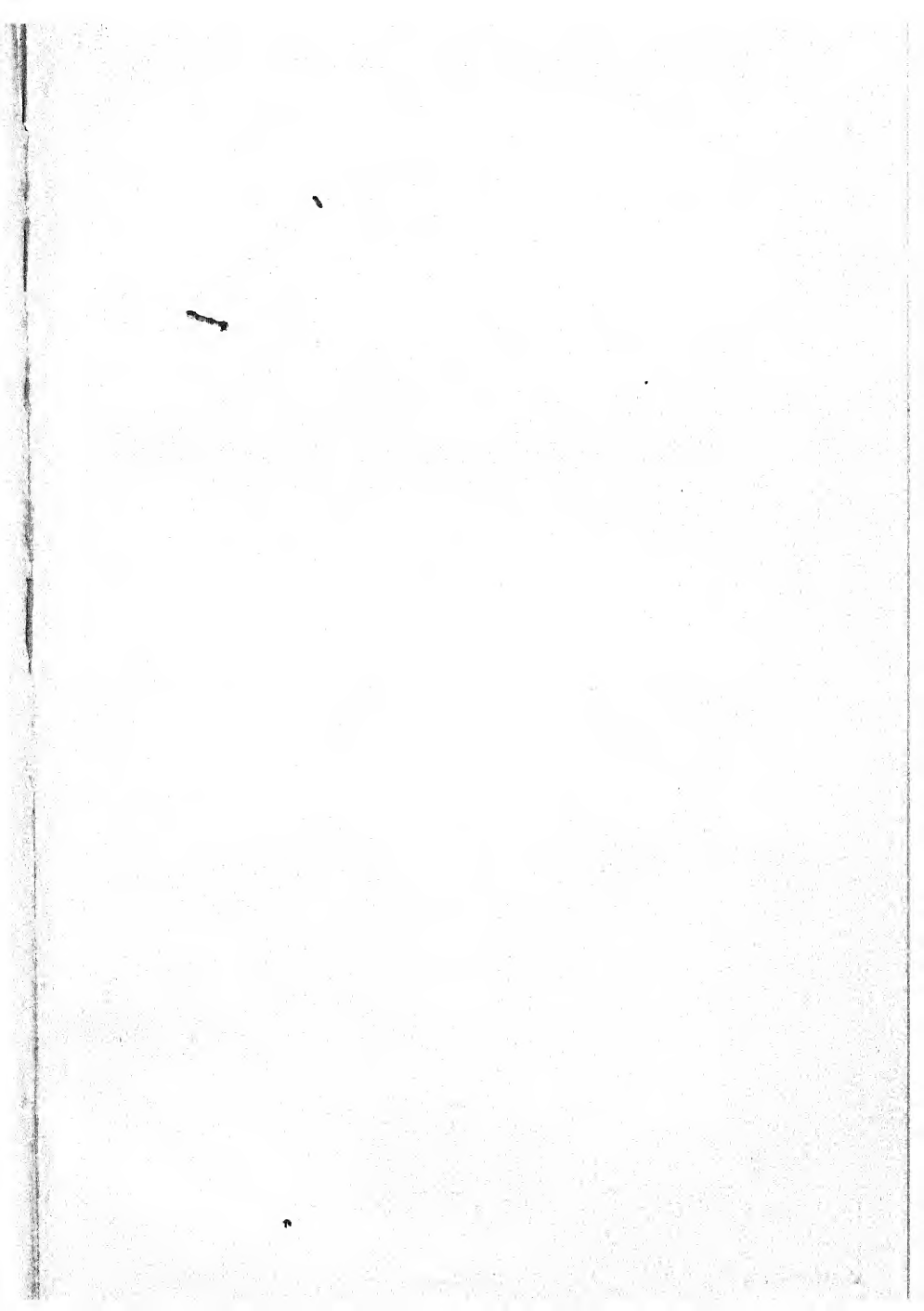
- (a) In the north the climate is hot and consequently unsuitable for white people.
- (b) Southwards the temperature is more bearable and moderate.
- (c) In the far south, in Tasmania, a temperate climate is experienced.

Rainfall.

Lying as it does mainly in the zones of the South-East Trades, the eastern coasts receive most precipitation from the winds blowing in from the sea. Once past the dividing range, the rainfall gradually decreases. The southern limit of the South-East Trades strikes the eastern coast at about 30° S., and the quantities of rainfall vary according to the differences in elevation of the shores.

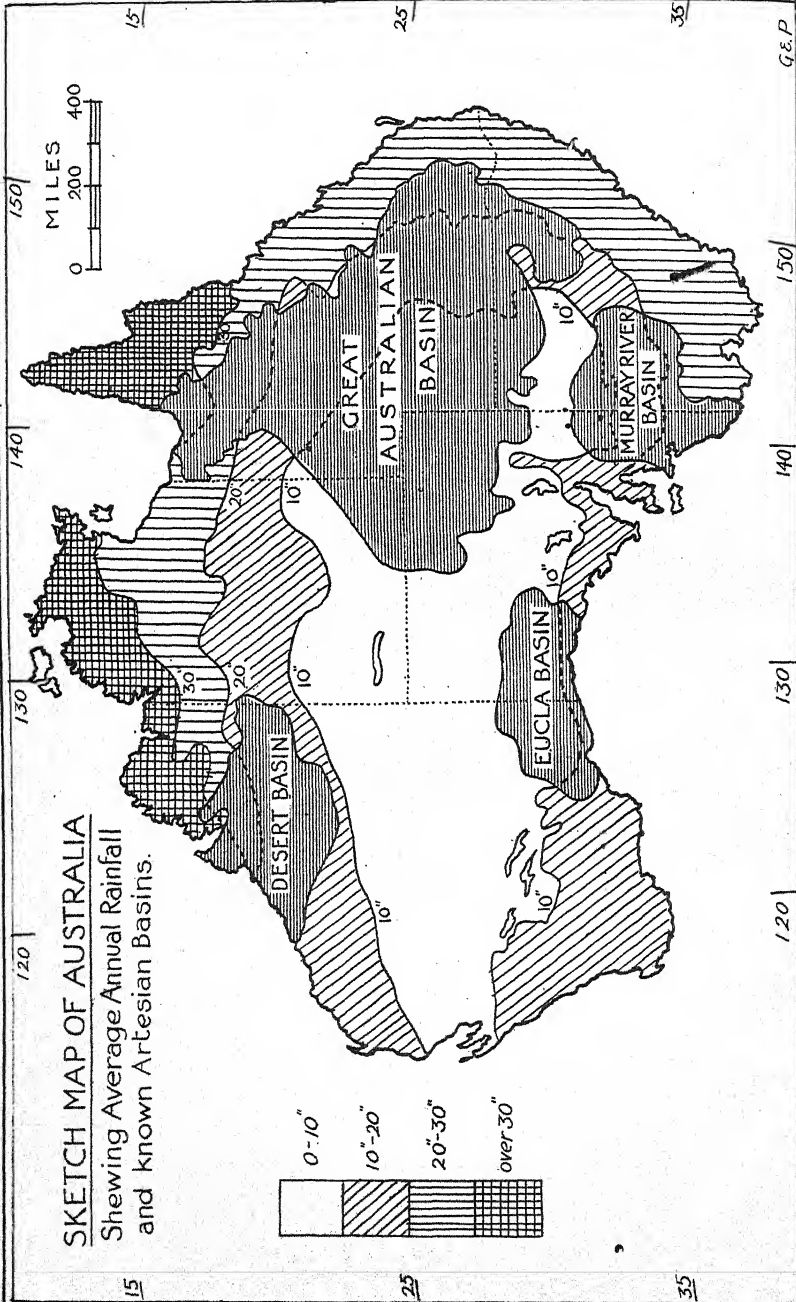
During the Australian summer the central plain becomes very hot, and winds from a north-east direction blow in from the sea, causing a typical monsoon effect.

The south and south-west coasts have the Mediterranean type of climate—winter rain and summer drought.



SKETCH MAP OF AUSTRALIA

Shewing Average Annual Rainfall
and known Artesian Basins.



The position is therefore as follows :—

In the north ... Most rain in summer.

In the south ... Most rain in winter.

In the east ... Rain at all times.

In the centre ... Little rain at any time, a considerable area receiving less than ten inches.

Australia, by reason of this uneven distribution of rainfall, has the same problem of drought as India. Extensive artesian borings are resorted to, the principal areas in which large-scale operations are carried out are indicated on the map. Considerable attention has also lately been directed to irrigation schemes which have as their aim the possibility of closer settlement. Such schemes are already being carried out in New South Wales, Victoria, Queensland and South Australia.

2. Historical Survey.

Though William Dampier was the first Englishman to visit the north-western shores of Australia in 1688, it was Captain Cook who, in 1770, by annexing the entire eastern coast, first brought Australia into political connection with Western civilization.

Australia, as is well known, was first used as a penal settlement. Many of these convicts were not of the convict type as understood to-day, but were often unruly soldiers disbanded after foreign wars, or rebellious politicians, etc. These men or their descendants often became leading men in their various provinces and were anxious to build up a strong, well-governed state.

About 1835, under the auspices of Edward Gibbon Wakefield, a stream of immigration of good type set in, and in this way the gradual settlements along the eastern and southern coasts were begun.

Between 1850 and 1860, New South Wales, which included Queensland, South Australia and Tasmania, received a recognized constitution on the familiar Canadian model. In 1890 Western Australia was also recognized. Between 1851 and 1881 the population, hitherto dependent upon agricultural and pastoral pursuits, had increased slowly, but the discovery of gold trebled the population in thirty years.

It will have been noticed that each state grew up independently. There was no native population sufficiently strong to demand union for the sake of protection, nor possibility of any invasion or interference from outside. Each state was occupied with its own individual difficulties, and was not concerned about the wider aspect of pan-Australian questions.

The rush of immigrants after the discovery of gold had two important consequences—

- (a) The entry of large numbers of Asiatics.
- (b) The large mining population made heavy demands for supplies, machinery, clothing, etc., and regular sea communication was opened up between Great Britain and Australia.

The presence of many Asiatics working side by side with white labour showed quickly that the coloured man could work for less and as hard as the white man, and their presence was felt to be a danger to the State. This instinct of a danger that was common to all served to unite the States.

The second factor made a beginning of the great export trade, first in wool, but later in wheat, chilled meat, etc., between Australia and Great Britain and between Australia and the thickly populated areas of the Malay Peninsula and China.

By 1899 the requisite number of votes was obtained for the proposed federal constitution, which came into actual being in 1901, when the first Federal Parliament was opened by H.R.H. the then Duke of York. In 1911 the Northern Territory was transferred to the Commonwealth, and compulsory military training was first introduced. In 1927 the seat of the Federal Government was transferred from Melbourne to Canberra, and the new Parliament opened by the Duke of York, acting on behalf of H.M. the King.

3. Political Divisions.

(A) New South Wales.

Capital, Sydney. Population 2,400,000. Area, 310,372 square miles.

The State of New South Wales is the oldest in the Commonwealth. It maintains within its borders 50 per cent. of the sheep in the Dominion. It is rich in all minerals except iron ore, the aggregate value of all minerals won being £20,000,000, of which 50 per cent. is represented by coal from the Newcastle area.

Port Jackson (Sydney) and Newcastle are the principal ports, the first-named in point of tonnage entered and cleared being the most important harbour in the Dominion, while the port of Newcastle takes fourth place.

(B) Victoria.

Capital, Melbourne. Population 1,749,000. Area 87,884 square miles.

Soil and climate are the best in Australia. Melbourne (Port Phillip), at the mouth of the Yarra, and Geelong are the principal harbours, Melbourne being only second in importance to Sydney.

(C) Queensland.

Capital, Brisbane. Population 900,000. Area 670,000 square miles.

The total value of all crops was £15,000,000, tropical products, bananas, cotton, oranges, sugar-cane and tobacco being extensively cultivated. The value of wool was about £10,000,000. The value of all minerals won was £1,750,000, of which coal was valued at about £1,000,000.

Brisbane and Rockhampton are the principal harbours.

(D) South Australia.

Capital, Adelaide. Population 578,000. Area 380,000 square miles.

Part only of the total area is suitable for agricultural and pastoral occupation.

Minerals to the average value of £1,250,000 are produced, iron and copper being the most important.

Port Adelaide and Port Pirie are the principal harbours, Adelaide taking third place after Sydney and Melbourne.

(E) Western Australia.

Capital, Perth. Population 400,000. Area 975,920 square miles.

Agriculture, grazing, and mining are the chief occupations, the total value of which averages £30,000,000 annually.

The principal harbours are Perth and Freemantle, the last-named being fifth in importance in the Dominion.

(F) Tasmania.

Capital, Hobart. Population 212,000. Area 26,000 square miles.

Tasmania is largely mountainous, a valley running from north to south through the island.

The climate is the best in Australia, and the valleys are particularly suited for fruit cultivation.

Minerals to the value of £1,333,000 were produced. Launceston is the principal port and railway terminus of the island.

(G) The Northern Territory of Australia.

The area of the Northern Territory is 523,000 square miles. The European population in 1927 was 2,700.

The soil of the Territory differs widely. Tropical and sub-tropical products could be grown successfully.

The natural grasses in most parts are rich in nutriment. The Territory is rich in mineral resources, largely undeveloped, tin ore, mica and gold being the principal.

Port Darwin is the principal harbour.

(H) Federal Capital Area.

In 1911 the Commonwealth acquired from the State of New South Wales a site for a federal capital, known as Yass-Canberra. Building operations were begun in 1923, and Parliament was opened in May, 1927, by H.R.H. The Duke of York. In 1917 an area of 28 acres was acquired at Jervis Bay for the purpose of erecting a Naval College.

4. Constitution and Government.

Though, from the nature of its settlement, strong individualistic tendencies were early developed between the various colonies, the need for inter-state co-operation was early recognized. The first step towards federation was taken in 1885, when the Federal Council of Australasia was brought into being; it came to an end in 1899.

The Government of the united Commonwealth was established on July 9th, 1900, by the Commonwealth of Australia Constitution Act, 63 & 64 Vict., Cap. 12, which provides for a constitutional form of government on the familiar model. Parliament is composed of the Governor-General,* Senate and House of Representatives.

The Senators, 36 in number, are elected for a term of six years, half retiring at the end of every third year, and are eligible for re-election.

Members of the House of Representatives number 76 and are elected for the full duration of the Parliament, which is limited to three years.

The Prime Minister and his Cabinet are drawn from the predominant party in the House of Representatives, and retain power so long as they hold the confidence of the House.

There also exist Upper and Lower Houses of Parliament for the various States except Queensland, which is uni-cameral. State Governors are appointed by the Crown after consultation with the Government of the Dominion.

Under the terms of the Constitution the Federal Government of the Dominion acquired and may acquire certain powers surrendered by the States. Federal control is exercised in those spheres with which Australia as a whole is concerned—defence, posts and telegraphs, old age pensions, etc.

* Sir Isaac Isaacs, appointed Governor-General in 1930, is the first Australian to hold this office.

Matters left to the control of the various States are not uniform, the Federal Government assuming control of certain subjects in some states and not in others.

In questions of finance a co-operative system between the States and the Federal Government has been established, the latter assuming responsibility for part of the loans previously raised by the individual States. A Federal Loan Council was established in 1924. By this means competition between the States is avoided and better terms are realized.

Use is also made of the Referendum to decide any question involving an alteration to the Constitution.

5. Resources.

Population.

The population in 1928 numbered 6,336,786. Since the beginning of the present century the population has increased by 60 per cent., the natural increase in the people in relation to the increase by immigration being roughly 2 to 1. The abnormal concentration of population in the principal cities of Australia is a fact having considerable bearing upon the development of a country which in the main depends upon the agricultural and pastoral industries. The total population of the capital cities of the six states of the Commonwealth is over three million persons, equivalent to 46 per cent. of the entire population of the country.

Industries.

AGRICULTURAL AND PASTORAL PRODUCTS.

	(1) Total Production.	(2) Total Exports.	(3) Exports to U.K.	(4) Total Exports expressed as Percentage of U.K. Con- sumption.
Wool ...	855,790,000 lb.	665,649,000 lb.	210,000,000 lb.	66

Wool production is the chief staple industry of the Dominion. The wool production of Australia represents 25 per cent. of the total world production, and 50 per cent. of the world supply of fine quality merino. Considerable quantities of wool are now retained for manufacture in the mills of the Dominions.

	(1)	(2)	(3)	(4)
Beef ...	10,000,000 cwts.	1,700,000 cwts.	1,000,000 cwts.	5
Mutton ...	4,350,000 cwts.	700,000 cwts.	500,000 cwts.	6
Wheat and Flour	3,500,000 tons	1,633,000 tons	471,000 tons	25
Butter ...	3,000,000 cwts.	800,000 cwts.	488,000 cwts.	18

The reasons militating against an increase in the exports of frozen beef from Australia have been noted elsewhere, and are mainly due to the difficulty of freezing large carcasses without "drip." The sheep of Australia, being mainly bred for wool, are not, as those bred in New Zealand, entirely suitable for freezing for the meat trade.

MINERALS.

The extent of the mineral wealth of Australia is not as yet completely ascertained, but it is believed that the resources of minerals of every kind, except petroleum oil, are very great. Gold, silver, lead, copper and zinc and tin are at present the principal minerals mined and treated within the Dominion.

COAL.—The average value of coal won is about £12,000,000 per annum. New South Wales is the principal producer (average production 10,000,000 tons per annum). The areas worked at present lie between Newcastle and Sydney. The Ipswich district in Queensland is, next to the New South Wales areas, the other principal producer. Exports of coal from the Newcastle area average three and a half million tons annually.

GOLD.—The average value of the gold produced in Australia is approximately £2,250,000 sterling annually. The Kalgoorlie and Coolgardie areas in Western Australia and Ballarat (Victoria) are the principal producers, though gold occurs and is worked in all the states. All the gold obtained is crushed from gold-bearing quartz, no alluvial gold being now obtained. The amount of gold won in Australia shows a progressive decline.

SILVER AND LEAD.—Silver and lead are produced to an average yearly value of £5,750,000 sterling. The Broken Hill areas in New South Wales are some of the principal areas of production in the world. In Queensland in the Cloncurry area discoveries made as recently as 1923 indicate that the area may be as rich in payable ores as the Broken Hill properties. Silver and lead

occur in smaller quantities in all the states, the total production of silver being $4\frac{1}{2}$ per cent. of the world production.

The greater part of the New South Wales production of ore is sent for treatment to Port Pirie (S.A.).

COPPER.—The average value of copper production is about £750,000 annually. Queensland, Tasmania and South Australia are the chief producers, but considerable deposits exist and are worked in all the states.

TIN.—The production of tin has a yearly average value of approximately £775,000, Tasmania, New South Wales and Queensland being the chief producers.

ZINC.—Zinciferous ore is produced principally in the Broken Hill areas (N.S.W.), to an average yearly value of £1,750,000 sterling. The greater proportion is exported to Tasmania for treatment at the Risdon works of the Electrolytic Zinc Co.

IRON.—Iron ores are widely distributed throughout Australia, but are not found in close conjunction with the coal deposits. Large deposits are at present worked at Iron Knob (S.A.).

The ore is smelted at Newcastle, the limestone necessary being obtained from Tasmania. Iron works at Lithgow use local supplies of iron.

INDUSTRIES.

The manufacturing industries of Australia, chiefly in Victoria, though protected by high tariff walls, are as yet insufficient to meet the home demand. Melbourne and Sydney are the principal industrial centres. The iron smelting works have already been noticed. Large woollen mills are situated at Geelong (V.). The principal engineering productions are agricultural machinery, railway and tramway construction, motors and cycles. The metallurgical industry is organized to provide a self-sufficiency in the basic requirements of practically all the other industries.

6. Communications.

Railways.

Total length, 26,738 miles.

Australia, unlike Canada, being ill-provided with waterways, development has been bound up with railway construction. In general terms there is a network of railway lines emanating from the principal agricultural, pastoral and mining areas and converging upon the principal ports, which are themselves connected by lines running approximately parallel to the coast.

Though railway construction began in 1854, little progress was at first made. Paucity of numbers and the fact that the beginnings of Australian prosperity were based upon the pastoral industries (sheep can be driven and wool requires no express transport) did not appear to warrant the adoption of boldly conceived schemes, such as that, for instance, which underlay the first inter-oceanic railway in Canada. In consequence railway development has followed parochial lines, the ill-effects of which are now acutely felt.

The general trend of construction has been to follow the coast-line, branch lines into the interior being thrust out into important pastoral or mining regions.

The various States have adopted varying gauges. In Victoria and South Australia the gauge is 5 ft. 3 in. ; in New South Wales, 4 ft. 8½ in. ; the trans-continental line from Port Augusta (S.A.) to Kalgoorlie (W.A.) is 4 ft. 8½ in. ; in Queensland and Western Australia the gauge is 3 ft. 6 in. A change all round to the British 4 ft. 8½ in. standard was recommended by a Royal Commission, but the expense, nearly £60,000,000, is prohibitive.

Port Darwin (Northern Territory) is isolated from the rest of Australia. From a military point of view this is a serious position.

In a report upon the condition of the Australian railways, Lord Kitchener said : " While developing the country, railway construction has resulted in lines that would appear to be more favourable to an enemy invading Australia than to the defence of the country."

The defects in the present system of railway communication, from a military point of view, are—

- (a) Lack of uniformity of gauge ;
- (b) Lack of lateral communication ;
- (c) The isolation of Port Darwin.

As a beginning to the removal of these transport difficulties, the Royal Commission of 1921 recommended the provision of standard (4 ft. 8½ in.) gauge track to connect Freemantle and Brisbane and the general conversion of all the broad-gauge lines in Victoria and South Australia to standard gauge, with the necessary alteration of rolling stock, etc., at a cost of about £22,000,000. Trans-continental east to west communication was finally completed by the opening of the Commonwealth line from Port Augusta (S.A.) to Kalgoorlie (W.A.).

It is further proposed to build a trans-continental north to south railway, which will bring Port Darwin into touch with the rest of the Commonwealth. So far the line has been constructed from Port Darwin for 264 miles to Mabarakank ; it is being slowly extended to Daly Waters, and thence to Alice Springs, where it will link up with the southern projection from Oodnadatta.

Communications by Air.

It will be noticed from the map that, while Australian railway construction has been planned to assist commercial development to the full, it fails to give adequate lateral communication. The rectification of this situation by the unification of the various gauges and the provision of lateral communication was found to be extremely costly, and an attempt has, therefore, been made to utilize aircraft to overcome these difficulties.

Three subsidized aircraft companies operate air lines which will have the general effect of providing fast communication between all the chief Australian cities and will also link together the various termini of the various State railway systems, thus effecting one form of lateral communication. Port Darwin will also, by a combined rail and air route, be brought into contact with other parts of Australia. The general planning of the air routes, which should be studied on the map, indicates a real effort to rationalize the transportation system of a great continent.

Aerial development in Australia is strongly supported both by the Commonwealth and the Provincial Legislatures. Suitable aerodromes and emergency landing-grounds have been provided over a total of 8,000 miles of airways. The Commonwealth Government subsidizes three aircraft companies who between them cover approximately 5,000 miles of air route.

The principal routes covered by these companies are :—

(a) BY WESTERN AUSTRALIA AIRWAYS.

- (i) Perth to Derby (W.A.) : 1,500 miles.
- (ii) Derby to Wyndham (W.A.) : 650 miles (surveyed and shortly to come into operation).
- (iii) Perth (W.A.) to Adelaide (S.A.) : 1,500 miles.

A weekly service is maintained in each direction and is operated so that mails may arrive in Adelaide twenty-four hours after the mail steamers reach Perth. Part of the route is equipped for night flying. Route (ii) is to be continued to Port Darwin.

(b) BY QUEENSLAND AND NORTHERN TERRITORIES AERIAL SERVICES.

Brisbane—Charleville—Cloncurry—Camooweal and Cloncurry to Normanton.

The routes Brisbane—Camooweal (1,269 miles) and Cloncurry—Normanton (215 miles) are operated once weekly in each direction.

The route is designed to link up the termini of the Queensland railways at Charleville, Longreach, Winton, etc., to Cloncurry, and is to be continued from Camooweal via Daly Waters to Port Darwin.

(c) BY THE LARKIN AIRCRAFT SUPPLY COMPANY.

- (i) Adelaide—Cootamandra (578 miles) via Mildura, Hay, Narrandera, weekly service.
- (ii) Hay—Melbourne (233 miles) via Deniliquin and Echuca, twice weekly.
- (iii) Mildura—Broken Hill (189 miles) twice weekly.

Further proposed services are—

- (i) Melbourne—Hobart (425 miles).
- (ii) Sydney—Brisbane (550 miles).

Considerable progress has also been achieved in the construction of aircraft for local use by local firms constructing under license from English manufacturing companies.

7. The Defence Forces of Australia.

The military forces of the Commonwealth are raised, maintained and organized under a series of Defence Acts.

The three Services are under the control of a single Minister of Defence. The Minister is assisted by three service and four civilian boards. These boards correspond to the service councils and departments of the Admiralty, the War Office and the Air Ministry.

Military Forces.

Military forces raised and maintained and organized under provisions of the Defence Act, 1903-18, consist of—

- (a) Permanent force ;
- (b) Citizen forces.

(a) The permanent force consists of corps for the purpose of providing commanders and staffs for formations, headquarters, etc. It provides nucleus garrisons at defended ports and instructional cadres for the citizen forces.

It is recruited by voluntary enlistment and corresponds to the Regular Army in Great Britain.

(b) The citizen forces are raised for the defence of the Commonwealth and constitute the field army for that purpose. They are recruited on a compulsory basis, and are not liable for service outside the Commonwealth.

In theory, every male, having resided for six months in Australia and being a British subject, is liable to be trained in peace time in varying stages between the ages of 12 and 26.

In practice, however, training is restricted to senior cadets of the age of 17 and to members of the citizen forces between 18 and 20 years of age.

ESTABLISHMENT.

Permanent Force ... 354 officers ; 1,461 other ranks.

Citizen Forces ... 3,151 officers ; 42,415 other ranks.

Peace and War Establishments correspond to those in Great Britain. The principle on which these arrangements are based is to maintain as large a nucleus in peace time as possible. The raising of entirely fresh units in war time is thereby avoided.

Higher administration, control and co-ordination of all military effort is brought about through the Council of Defence, which corresponds roughly to the Committee of Imperial Defence in Great Britain.

COMPOSITION AND ORGANIZATION.

(a) Permanent Force :—

Staff Corps ;

Australian Instructional Corps ;

Corps of Staff Cadets ;

together with Artillery, Medical, Veterinary and Supply units.

(b) The Citizen Forces.

(i) Two Cavalry Divisions ;

(ii) Four Infantry Divisions ;

(iii) Three Mixed Brigades, forming a fifth division if necessary.

TRAINING—(1) *Permanent Force*.—Trains regularly throughout the year. All ranks assist in the training of the Citizen Forces. Officers undergo the same examinations for promotion or staff college entrance as British regular officers.

(2) *Citizen Forces*.—Training commences at 18 and lasts three years and consists of four days home training and eight days training in camp.

The Royal Military College, Duntroon, trains officer cadets for permanent commissions in the Staff Corps. One year after graduation officers are sent to England or India for one year's attachment to the British Regular Army.

Naval Forces.

The Royal Australian Navy is controlled by the Minister of Defence, assisted by a board.

The policy of the Commonwealth is to undertake Australian naval defence herself. Since 1911, an Australian fleet has been built up. The fleet consists of the following vessels :—

Cruisers—*Australia* and *Canberra* 10,000 tons.

„ *Adelaide* and *Brisbane* 5,500 „

Flotilla Leader *Anzac* and eleven destroyers

Aircraft carrier *Albatross* 6,000 tons.

Sydney is a first-class naval station, and the base of the Royal Australian Navy. Melbourne is also a defended port.

Fuelling stations: Albany, Brisbane, Hobart, Adelaide, Thursday Island (Torres Strait).

Permanent Naval Forces ... Officers, 450 ; ratings, 4,409.

R.A.N. Reserve Officers, 253 ; ratings, 6,919.

To secure closer co-operation with the Royal Navy, arrangements have been made for the periodical exchange of a cruiser so as to give opportunities for experience in fleet exercises. Under a recent agreement a floating dock, capable of lifting 15,000 tons, is to be constructed at Walsh Island, Newcastle (N.S.W.). This dock will be able to accommodate the new 10,000 ton cruisers.

Air Forces.

The R.A.A.F. is constituted by the Air Force Act No. 33 of 1923 as part of the Defence Force. It is organized into a small permanent force and a citizen force, and thus corresponds to the Regular Air Force and Special Reserve of the Air Force in Great Britain.

The permanent force is recruited by voluntary enlistment for six years, with the option of re-engagement for further periods of six years until the retiring age is reached.

Service being compulsory, enlistment in the Citizen Air Force is an alternative to service in the military forces.

ESTABLISHMENT.

Permanent Air Force ... 110 officers, 850 airmen.

Citizen Air Force ... 54 officers, 285 airmen.

Command, administration, co-ordination as noted above under Land Forces.

COMPOSITION AND ORGANIZATION.—The R.A.A.F. (Permanent and Citizen Air Forces) comprises—

Headquarters, R.A.A.F. ;	No. 10 Fleet Co-operation
No. 1 Flying Training School ;	Flight ;
No. 1 Aircraft Depot ;	No. 1 Composite Squadron ;
Experimental Section ;	No. 3 Composite Squadron.

The personnel of Nos. 1 and 3 (Composite) Squadrons is one-third Permanent and two-third Citizen Forces.

The R.A.A.F. Reserve consists of—

- (a) Officers who have held short service commissions in the R.A.A.F. and who enrol in the reserve on the expiration of their service.
- (b) Pilots and mechanics of civil aircraft companies receiving Government subsidies.
- (c) Certain ex-Australian Flying Corps pilots.

TRAINING—Permanent R.A.A.F.—The training of the permanent R.A.A.F. is on the same lines as for regular R.A.F.

Officers undergo the same examinations for promotion and for entrance into the Staff College.

Citizen Force.—Pilots receive four months' training during their first year, and, if qualified as pilots, 25 days' training a year thereafter. Personnel other than pilots do 25 days' annual training.

A considerable development of Service aviation is to be expected within the next few years following the report of Air Marshal Sir John Salmond, issued in 1928. He recommends that in view of the great distances to be covered—the Australian coast line is 12,000 miles—it is not possible to be strong at all points, and that aircraft, by reason of their speed and mobility, are suitable to provide protective cover for separated localities. Aircraft would, therefore, fill the gap before the arrival of the slower ground forces.

It is believed that, in face of a determined opposition by aircraft, the landing of ground troops from transports, lighters, etc., could only be undertaken with great difficulty.

In this way Australia appears to be rationalizing her defence system.

The proposed development, spread over a period of nine years, is as follows :—

- (a) One army co-operation squadron (including one training flight) at Canberra.
- (b) Two flights single-seater fighters—one at Point Cook, Victoria ; one at Richmond, N.S.W.
- (c) Two coastal reconnaissance flights (boats)—one at Point Cook, one at Lake Macquarie, N.S.W.
- (d) Two bomber reconnaissance squadrons—one at Richmond, N.S.W. ; one at Laverton, Victoria.
- (e) One stores depot, A.R.S. and E.R.S., at Richmond, N.S.W.

- (f) One recruits' training section at Laverton, Victoria.
- (g) One wing headquarters at Richmond, N.S.W.
- (h) One R.A.A.F. cadet wing at the R.M.C., Duntroon.

Citizen Force : One bombing squadron at Perth, S.A.

Munitions.

MUNITIONS SUPPLY BRANCH.—This is a civil branch of the Ministry of Defence. It is responsible for the provision for the three Services of armament, arms, ammunition, equipment and supplies and stores, whether by manufacture in its own establishments or by contract with civil firms.

It is responsible for research, for the inspection (other than food, forage and fuel) of supplies obtained in Australia.

DEFENCE CONTRIBUTION OF THE COMMONWEALTH OF AUSTRALIA.

PERSONNEL.

	<i>Regular Force—</i>		<i>Citizen Force—</i>	
	<i>Officers.</i>	<i>Other Ranks.</i>	<i>Officers.</i>	<i>Other Ranks.</i>
Army	354	1,461	3,151	42,415
Navy	453	4,409		6,700
R.A.A.F.	125	777	54	285

APPROPRIATIONS IN MONEY.

							£
Army	...	...	...	...	...	...	1,605,000
Navy	...	...	...	...	...	...	2,152,000
R.A.A.F.	...	...	...	...	...	...	428,000

During the General War, 1914-1918, 330,000 officers and other ranks served with the Australian military forces.

8. The Defence of Australia.

The defence of Australia is primarily a naval question. The part to be played by the land forces would be to defend the harbours from which the fleet would operate. Reserves would probably be held in convenient strategic points for use where required. The army would thus have the advantage of operating on interior lines, but would have its back to the vast and waterless desert of the interior of Australia.

The projected railway from Port Darwin via Daly Waters (N.T.), Alice Springs (N.T.), to Oodnadatta (S.A.), whence a line already runs to Port Augusta, would relieve the naval forces of a considerable burden of defence.

The Great Barrier Reef, running a thousand miles down the coast of Queensland, constitutes a natural barrier, the gaps in the reef requiring careful navigation. Safe inter-communication between the eastern states is therefore provided.

Sydney, the focal point of the whole railway system, is dangerously exposed, as is Perth (W.A.), which is, however, remote from the industrial and more thickly populated parts of the continent.

In both Canada and Australia the same conditions of paucity of numbers and vast empty spaces appear. In Canada the frozen north and in Australia the tropical conditions of the northern territories are a bar to fuller expansion. In Canada this development will be—is being—accomplished by the white races; in Australia, on the other hand, it is doubtful whether the white races can develop their northern territories.

One further aspect of the defence problem is bound up with the political problem known as the "White Australia" question, in which political, industrial, economic and social considerations are involved. Australians of every political party regard unregulated Asiatic immigration as certain to upset the determination of the inhabitants to develop their resources, however slowly, only by white labour and for the benefit of the white man.

They fear that large bodies of immigrants of alien blood might by inter-marriage lower the mental, moral and physical qualities of the race and might upset the development of their political institutions. The presence of a large foreign element might in time of war constitute a threat to a country so under-populated as is Australia, and one in which the population has within recent years shown strong tendencies to gravitate towards the towns. The development of the air communications of the country appears to suggest the best possible solution of initial defence as it would allow of rapid concentration at any threatened point.

In common with New Zealand, Australian defence is primarily one of communications, and it is therefore to the new Imperial base at Singapore that the Australasian Dominions look for their defence.

9. Australian Dependencies.

(A) Norfolk Island.

Population 8,000.

The principal importance of Norfolk Island is that here the "all red" cable route from Great Britain via Vancouver, Fanning Island and Fiji bifurcates, one half going to New Zealand (400 miles) and the other half to Australia (Brisbane) (900 miles).

(B) Papua and the Mandated Area of German New Guinea.

Area 160,000 square miles. Population 600,000.

The island of New Guinea was originally partitioned between Great Britain, Holland and Germany. In 1906 the British protectorate was transferred to the Australian Government, and since the occupation by Australian military forces at the outbreak of the war, the German protectorate Kaiser Wilhelm Land has been held under mandate from the League of Nations.

Gold, silver, osmiridium, rubber and copra are exported. A promising copper-field near Port Moresby was abandoned in 1927 following the heavy fall in the price of the metal.

Considerable traces of oil occur over the island, and the Anglo-Persian Oil Company are carrying out extensive borings.

Port Moresby, Samarai and Daru are the principal entry ports.

Wireless stations are situated at Port Moresby, Samarai, Oriomo and Popo.

(C) Nauru.

Area 5,400 acres. Population 2,300.

The island of Nauru, originally part of German New Guinea, was occupied by Australian military forces in 1914, and is now administered as a mandate.

The island of Nauru and the Gilbert and the Ellice groups contain large deposits of rock phosphate. The rock phosphates of Nauru are worked on behalf of Great Britain, Australia and New Zealand, who each receive a stipulated share of the output.

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CHAPTER VIII

THE DOMINION OF NEW ZEALAND

1. General Physical Features and Climate.

THE Dominion of New Zealand is composed of two large and a number of small islands in the South Pacific, occupying as nearly as possible the centre of the water hemisphere of the globe.

The boundaries of the Dominion are fixed by Royal Letters Patent so as to extend from 33° to 53° S. latitude and from 162° E. longitude to 173° W. longitude. The total area of land enclosed within these boundaries is 103,862 square miles, of which the two main islands, North and South Islands, comprise 102,251 square miles.

By mandate of the League of Nations, the Dominion administers Western Samoa and, jointly with the British and Australian Governments, the island of Nauru.

The islands are generally mountainous. In the South Island, the Southern Alps run down the west coast and are continued into the North Island. In the extreme south-west the Alps run sharply down to the sea, forming true fiords. On the eastern side the slope is more gentle, broadening out into undulating plains, of which the Canterbury Plain, backing on Christchurch, is the largest and most fertile. Mount Cook, the highest peak of the range, is 12,500 ft., but many others lie in the snow line.

The islands are narrow in proportion to their total length, and, though lying in latitudes corresponding to those of Italy, the climate is generally insular and oceanic and is, generally speaking, equable with a uniform distribution of precipitation. Though the total length of the Dominion is nearly 900 miles, the mean temperature at sea-level only falls from about 62° F. in the far north to about 56° F. in the extreme south.

2. Historical Survey.

The history of New Zealand, so far as Europeans are concerned, began in 1642, when Tasman sighted the mountains of the South Island. Over a hundred years later, in 1769, it was practically re-discovered by Captain Cook, R.N.

In 1825 three separate attempts were made to found colonies in various parts of New Zealand, but none of these was successful, and for some years the only settlements were those round the

principal whaling stations. A number of Europeans gradually settled in different parts of the country and married native women.

The first body of immigrants under a definite scheme of colonization arrived in Port Nicholson on January 22nd, 1840, and founded the town of Wellington. During the few succeeding years the settlements of Nelson, Taranaki, Otago and Canterbury were formed by immigrants sent out by associations in the United Kingdom.

In 1840 British sovereignty was formally proclaimed.

In 1853 responsible government was granted. In 1859 war broke out between the native inhabitants and the white settlers. The war ended in 1870, and since that date the Maoris have received representation in the Dominion Parliament.

The history of New Zealand is one of steady development of her material resources and of many interesting experiments in social legislation. In New Zealand, as in Australia, the State is the guardian as much of the individual as of the community at large.

3. Political Divisions.

Unlike Canada and Australia, New Zealand possesses no provincial legislatures. For administrative purposes, as in England, the country is divided into counties.

The principal towns of New Zealand are—

WELLINGTON.—Population 130,000. Wellington is the capital of the Dominion and the seat of government, being conveniently situated for both islands. It possesses a good harbour.

AUCKLAND.—Population 207,000. Auckland is situated in the North Island on the narrow isthmus separating Henraki Gulf and Manukan Harbour.

It possesses a fine harbour and carries on considerable trade with Fiji, the Sandwich Islands and San Francisco. Gold and coal are mined in the neighbourhood. Shipbuilding, sawmills and paper-making are included in the industries. Auckland controls the traffic of the North Island.

CHRISTCHURCH.—Population 123,000. Christchurch owes its importance to its situation in the centre of the fertile Canterbury Plain. Connected by rail with Port Lyttleton, it is the collecting centre for the export of the dairy produce and frozen meat of the district.

Coal is mined in the surrounding district. Traffic between North and South passes through Christchurch.

DUNEDIN. Population 85,000. Dunedin lies in the centre of the Otago district. Gold and coal are mined in the surrounding district, and a considerable export of coal passes from Port Chalmers, with which Dunedin is connected by rail.

It will be noted that the chief towns of New Zealand lie on or near the coast. This is due to the fact that further inland communication is difficult and the most fertile land lies along the coast.

4. Constitution and Government.

The Government of the Colony was first vested in a Governor, responsible only to the Crown. Political development followed familiar lines and needs no recapitulation. In 1853 representative institutions were set up, and in 1907 New Zealand was raised to the status of a Dominion.

The Government consists of the Governor-General, a Legislative Council and a House of Representatives.

Members of the Legislative Council, forty in number, are appointed by the Governor and hold their office for a period of seven years. Membership of the House of Representatives is secured by election. The Prime Minister is the head of the executive council, upon the advice of which the Governor-General acts.

5. Resources.

Population.

The population is 1,389,076. The decennial census shows that between 1901 and 1921 the increase was 58 per cent. Increase by immigration during the last five years has amounted to about 45,000.

Except for a native population of some 65,000, the entire population is of British stock.

Industries.

AGRICULTURAL AND PASTORAL PRODUCTS.

	(1)	(2)	(3)	(4)
	Total Production	Total Exports.	Exports to U.K.	Total Exports expressed as Percentage of U.K. Consumption
Mutton and Lamb	cwts. 6,099,000	cwts. 3,314,000	cwts. 2,670,000	30
Dairy Produce—				
Butter ...	1,708,000	1,455,000	1,188,000	No figures available as to consump- tion in U.K.
Cheese ...	1,564,000	1,492,000	1,478,000	
Wool ... lb.	220,000,000	211,000,000	169,000,000	21

New Zealand is primarily a grazing country, over 17,000,000 acres having been laid down to English grasses. Owing to the moderation of the climatic conditions, stock do not require to be stalled during the winter, and, though natural fodder requires more or less supplementation, the average cost of stock production is considerably less than where artificial feeding must be resorted to or where droughts are liable to occur.

New Zealand mutton and lamb meet with a ready sale in the London market, but owing to the long distance the beef must be frozen, and this product compares unfavourably with the products of the grazing countries situated nearer to the United Kingdom.

During recent years the dairying industry has made rapid advances, particularly in respect of butter and cheese exports. Plenty of cheap electric power is available from the rivers and streams, enabling milking machines, etc., to be installed and thereby reducing both the cost of and the dependence upon hired labour.

MINERALS.

Though there are indications of a greater number of minerals to be found in New Zealand than in any other country of its size, the known reserves, with the exception of iron ores, are not thought to be very great. Relatively small quantities of gold, silver, tungsten and manganese are produced. The annual value of coal mined is about £2,500,000. Kauri gum, a constituent of paint and varnishes, is also exported. Sulphur is obtained in small quantities. Considerable expense has been incurred in boring operations for petroleum, particularly in Taranaki, Hawke's Bay and Canterbury areas. Petroleum of good quality but in limited flow has been proved in several of these areas, but production has not yet reached commercial proportions.

INDUSTRIES.

The population of New Zealand is too small to maintain secondary industries on a large scale, such industrial activity as exists being mainly concerned with the treatment of primary products.

6. Communications.

Railways.

Total length 3,180 miles.

Of the total length of State-owned railways, 1,399 miles is in the North Island and 1,781 miles in the South Island. There are also a few miles of track owned and operated by private companies. The railways in the main follow the coast, but in 1923 the Otira tunnel connected the East and West Coast systems.

The railways have played an outstanding part in the economic development of the Dominion, and in consequence profits, after a suitable dividend on capital invested has been obtained, are returned to the users in the form of reduced charges. The development of air lines may shortly be undertaken.

7. The Defence Forces of the Dominion of New Zealand.

Military Forces.

The defence forces of New Zealand are divided into—

- (a) Permanent Force ;
- (b) Territorial Force.

The Permanent Force is raised by voluntary enlistment, provides commanders and staffs at headquarters of formations, etc., and assists in the training of, and provides instructors for, the Territorial Army. It corresponds to the Regular Army in Great Britain.

The Territorial Force is maintained for the defence of New Zealand and constitutes the field army for that purpose. Service is compulsory, men between the ages of 18 and 24 years completing three years' training provided they live within a specified distance of a training centre.

The New Zealand military forces are under a general officer commanding, who has at his disposal general and administrative staffs.

New Zealand is organized into three commands, and the forces are organized so as to form a complete infantry and a mounted division.

Air Forces.

The New Zealand Air Force consists of a Permanent Air Force and a Territorial Air Force. Both are filled by voluntary enlistment.

COMPOSITION AND TRAINING.—One Air Force Depot and Training School. At present Territorials are trained at the Air Force Depot, grouped in one pool.

Stations : Wingram Aerodrome at Christchurch ; combined air base at Hobsonville.

Naval Forces.

The Naval Defence Act, 1913, provides for the establishment of a New Zealand Naval Force. The Force is manned by voluntary enlistment. The division consists of two cruisers and one sloop.

DEFENCE CONTRIBUTION OF THE DOMINION OF NEW ZEALAND.

	<i>Permanent—</i>		<i>Territorial—</i>	
	<i>Officers.</i>	<i>Other Ranks.</i>	<i>Officers.</i>	<i>Other Ranks.</i>
Army ...	110	421	805	20,140
Navy ...	—	—	—	488 (R.N.R.)
N.Z.A. Force	5	14	101	—

(b) APPROPRIATION IN MONEY.—The annual appropriation for defence is approximately £1,125,000, of which sum £125,000 represents a proportion of a contribution of £1,000,000 towards the cost of the Singapore Naval Base.

(c) CONTRIBUTIONS DURING THE GENERAL WAR.—During the course of the war the Dominion supplied about 100,000 officers and men, representing nearly 40 per cent. of the Dominion's manhood between the ages of 20 and 45.

8. The Defence of New Zealand.

This has already been referred to under the similar section dealing with the Dominion of Australia.

9. The Dependencies of the Dominion.

The dependencies of New Zealand consist of a number of islands, some of which are held to be part of the Dominion proper ; others have been annexed, and, in addition, since the war a League of Nations mandate has been accepted for certain other possessions lately belonging to Germany. Only the most important of these will be considered.

DEPENDENCIES.

Cook Islands.

Population 13,877. Principal exports, copra, pearl-shell. In W/T communication with New Zealand.

MANDATED TERRITORIES.

(A) Western Samoa.

Western Samoa, which became part of the German Empire in 1900, was occupied by a New Zealand Force on August 29th, 1914, and handed over to be administered as a mandated area by New Zealand, acting on behalf of the League of Nations.

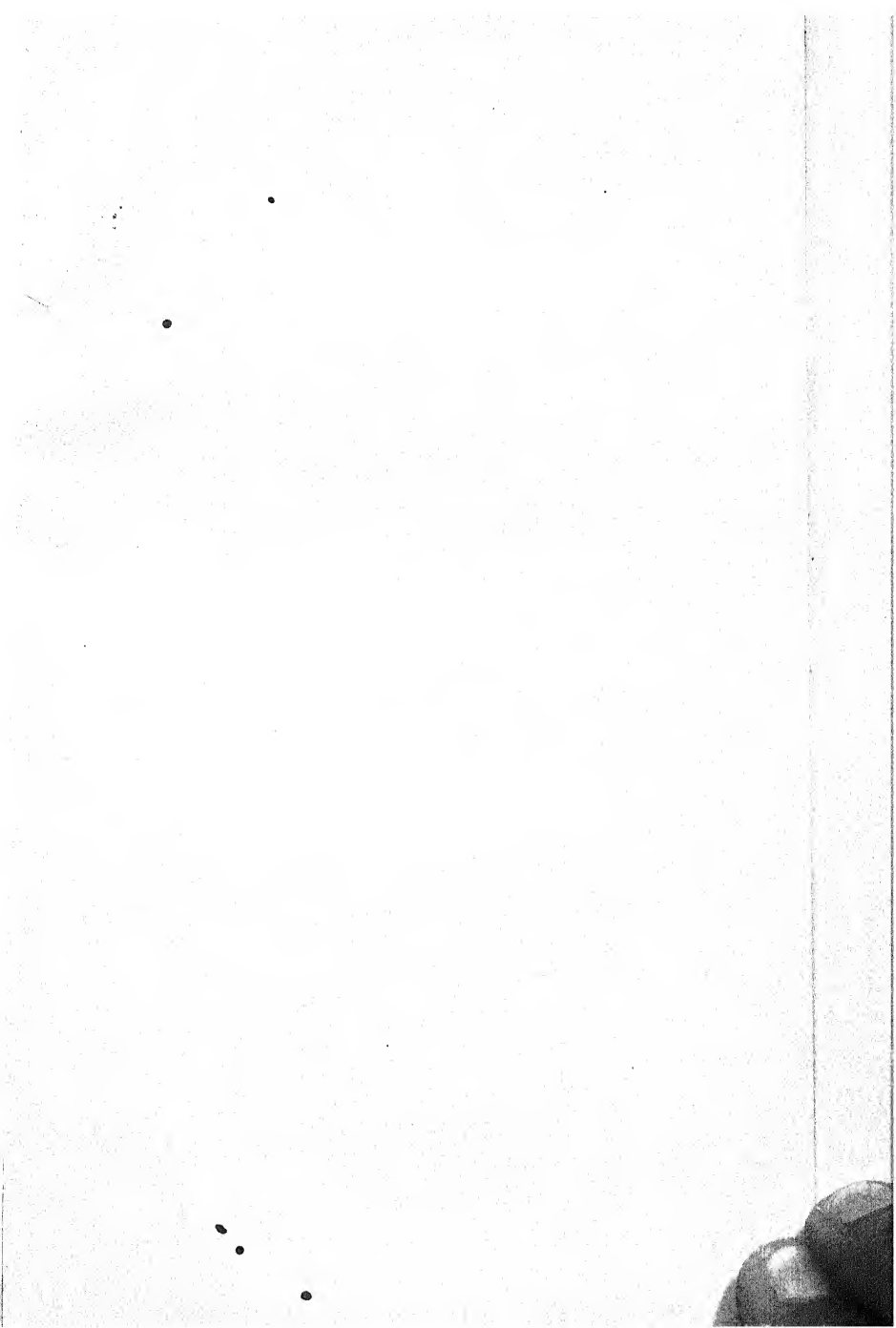
The population of the Western Samoa and the adjoining islands is 42,000. Copra, valued at approximately £250,000, is the chief article of export. It is believed that cotton could be successfully cultivated.

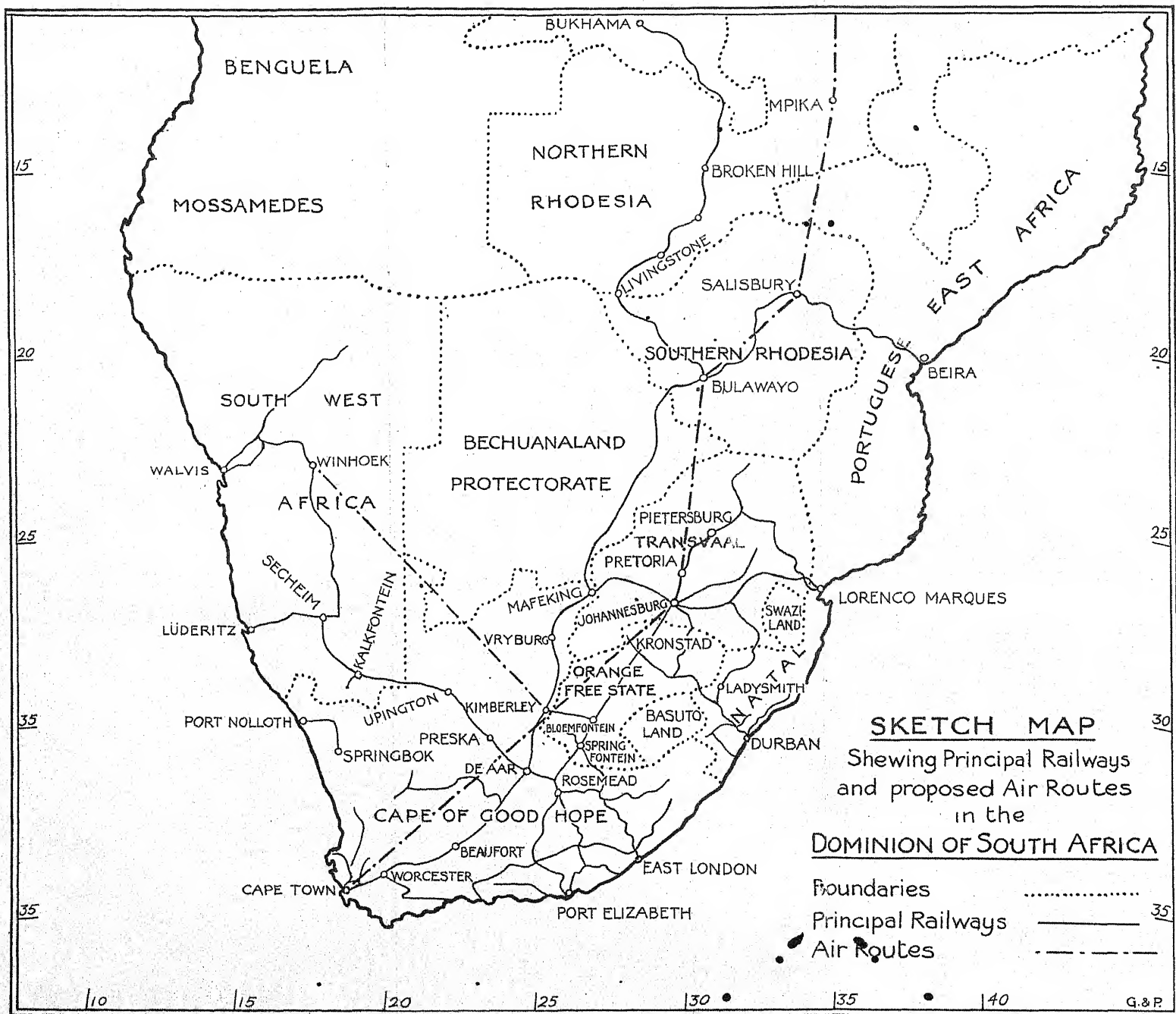
(B) Nauru.

The mandate for this island is shared by Great Britain, Australia and New Zealand. Particulars of the island are given under the corresponding section of the chapter dealing with the Dominion of Australia.

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CHAPTER IX

THE DOMINION OF THE UNION OF SOUTH AFRICA

1. General Physical Features and Climate.

THE Union of South Africa, under the Act of 1910, is composed of the following : Cape of Good Hope Province, Natal, Transvaal, and the Orange River Colony.

The provinces of the Union are included between latitude $30^{\circ} 50'$ S. and 22° S. The northern boundary is the Limpopo River.

The total area of the lands of the Union is 471,917 square miles.

In general configuration, the land of the Union is not dissimilar to that of Australia.

On the east, the low-lying land confined to the sea margin rises steeply to the Drakensberg Range. Westward of the range the slope is gentle, the land falling to a lofty plateau some 4,000 ft. in height. Approaching the west coast, the plateau falls gradually to a height of some 2,000 ft., ending sharply in a narrow coastal plain.

The configuration of the south coast is somewhat different. The coastal plain is wider and rises to a plateau known as the Little Karoo, a narrow tableland about fifteen miles in width, crossed from east to west by a series of parallel mountain ranges separated by narrow valleys. The average elevation is about 1,500 ft. Beyond further ranges of hills, the Witteberg, Zwartberg and Zuurberg, lies the second plateau of the Great Karoo, having an average elevation of from 2,000 ft. to 3,000 ft. The Great Karoo is dry, having an average rainfall of from 5 in. to 15 in. This plateau stretches north-east into the Orange River Colony and Transvaal, being known as the High Veld. It is encircled west, south and east from the Limpopo to the Orange River by mountainous ranges, and has an average elevation of 4,000 ft., rising to over 6,000 ft. in North-Eastern Transvaal, and to 11,000 ft. in Basutoland. The average rainfall is from 20 in. to 25 in., and the climate is invigorating, particularly in the Witswatersrand district.

Climate.

During the summer the continent becomes an area of low pressure, and wind sweeps in in cyclonic form from the Indian

Ocean. The winds drop their moisture on the east side of the Drakensbergs, and, passing over the crest, carry moisture over roughly half the breadth of the continent. The rest of the continent, the winds being now dry, has summer drought.

In the winter a high-pressure area forms over the land, bringing north-west winds to the south-west corner of the continent; in this way the western half of Cape Colony gets winter rain, making it a suitable wheat-growing country.

As in Australia, the eastern coast between the sea and the crest of the Drakensberg receives most rain, about 40 in. being the average. The amount of moisture gradually lessens towards the west coast, falling as low as 5 in. on the fringe of the Kalahari Desert to the north. To the south-west of Cape Colony winter rain and summer drought occur.

The west and south coasts are warmed by the Agulhas and the Mozambique currents, while the west coast is cooled by the cold Atlantic Benguela current.

The central plateau experiences extremes of heat and cold between summer and winter.

The climate of the Union is generally cooler than that met with in similar latitudes in the Northern Hemisphere, and the mean average temperature corresponds to that found in Europe 7° to 10° farther from the Equator. This amelioration of climate is due to the general configuration of the country and to the relatively small land areas which admit of the winds from the surrounding oceans, east, south and west, exercising a moderating influence.

2. Historical Survey.

South Africa has three native races. Least important in point of numbers and civilization are the Bushmen. They have now largely disappeared, being found only in the fringes of the Kalahari Desert. The Hottentots succeeded the Bushmen. They were mainly an unwarlike, pastoral people, and were easily defeated by the third race, the Bantu, now largely predominant in South Africa. These peoples were strongly organized militarily and were of a fine fighting stock.

The Dutch first settled in the country—mainly as a stepping-stone on the route to the Far East—in 1652. Land was acquired by purchase from the Hottentots, and the colony was ruled by the Dutch East India Company.

In 1620 possession of Table Bay had been formally taken by two British sea captains, but no further action was taken by the Government. In 1795 a landing was effected at Simon's Town, and the capitulation of the Dutch governor was received. In 1803 the colony was restored to the Dutch, but finally, on renewal of the war with Holland, the Cape was again occupied, and was

finally ceded to Great Britain, the conquest being confirmed by the Congress of Vienna in 1815.

During the next twenty years the changes introduced by the British Government did not receive acceptance by the Dutch farmers. The Act for the emancipation of slaves in 1838 caused large numbers to "trek" into Natal, which colony was, however, soon annexed by Great Britain.

The problem facing the British Government was a difficult one, the defence of the colony against native attacks in the north necessarily depending upon the front displayed by the then disaffected Boer farmers, since at that time it was not possible to extend British influence beyond the limits of the Cape and Natal Colonies.

Various devices were attempted for the solution of the problem, but all broke down for one or other of two reasons—native outbreaks or the unwillingness or inability of the Boers to keep on reasonably friendly terms with the natives among whom they settled, whether in the new district between the Orange and the Vaal Rivers or, later, in the Transvaal. Finally the Sand River Convention of 1852, and the Bloemfontein Convention of 1854, allowed the establishment of independent Boer Republics of the Transvaal and the Orange River Free State.

The discovery of diamonds at Kimberley, leading to disputes between the Free State Government and the native chiefs, caused the annexation of the district by the Cape Government, a sum in compensation being paid. The discovery of gold at Johannesburg, in the Transvaal, soon led to violent disagreements between the immigrants, mostly British, and the able but ambitious leader of the Transvaal, Paul Krüger. The Jamieson Raid of 1896 to help the immigrants in the Transvaal had aroused the deep suspicion of both the Free State and the Transvaal, and a defensive alliance between the two republics was made.

War between the republics and Great Britain followed inevitably in 1899-1902. Responsible government was restored in 1906, and the Union of South Africa accomplished in 1909, when Dominion status of the familiar type was introduced.

3. Political Divisions.

(A) Province of the Cape of Good Hope.

The area of the province is 276,000 square miles, and it has a total population of 2,781,000, of which 650,000 are Europeans. The chief towns are Cape Town (130,000), Port Elizabeth (33,000), East London (23,000). The chief products of the Colony are sheep's wool, mohair, hides and maize. Cape Town, Simon's Town and Port Elizabeth are the chief ports.

(B) Province of Natal.

The area of the province is 35,284 square miles. The total population in 1921 was 1,429,000, of which about 140,000 are Europeans. The chief products are sheep's wool, maize, sugar. The colony is rich in minerals, particularly coal. The output of the various factories averages some £20,000,000. Durban is the principal harbour and coal-exporting centre. Durban (151,000) and Pietermaritzburg (86,000) are the principal towns.

Newcastle is the principal colliery centre and the centre of the iron and steel industries.

Natalite, an extract from the sugar cane, has recently been produced with success as a form of motor spirit.

(C) Province of the Transvaal.

The area of the province is 110,000 square miles. The population in 1921 was 2,000,000, of which 500,000 are Europeans. The chief towns are Johannesburg (170,000), Pretoria (54,000), Germiston (20,000).

The gold output in 1929 totalled £44,000,000. The province is mainly a stock-breeding country. Maize and tobacco are also grown. Coal is produced at Witbank and Middleburg. Small iron and steel works are situated at Vereeniging.

(D) Province of the Orange Free State.

The area of the province is 50,000 square miles; the total population in 1921 being 600,000, of which 190,000 are Europeans. The province affords excellent grazing and agricultural lands. Stock raising and maize growing are the principal occupations, accompanied by coal mining and the production of diamonds. Bloemfontein (40,000) is the principal town.

4. Constitution and Government.

The Constitution of the Union of South Africa is based upon the South Africa Act of 1909, which made provision for the establishment of a government comprising a Governor-General appointed by the King, and for a Parliament composed of two houses, a Senate and a House of Assembly. The Senate is composed of 40 members, 8 of whom are nominated by the Governor-General, the remainder being selected in equal proportion from the four provinces of the Union. Four of the nominated senators are especially selected for their knowledge of native affairs. They hold the office for ten years. Members of the House of Assembly number 135, 51 from the Province of Cape of Good Hope, 50 from the Transvaal, and 17 each from Natal and the Orange Free State. The Cabinet is composed of Ministers of

State not exceeding 11 in number. Cape Town is the Parliamentary centre, and Pretoria the headquarters of the Government administration. There are also single-chamber legislatures with an administrator in each province, appointed for five years. The Union is represented abroad in London by the High Commissioner for South Africa, and by Ministers in Washington, Rome and The Hague.

The Governor-General of South Africa holds also by letters patent of 1878 the Office of High Commissioner, and as such is Governor of Basutoland and supervises the affairs of the Bechuanaland Protectorate and of Swaziland. These territories are dealt with in Chapter XI.

5. Resources.

Population of the Union.

In 1928 the total population was 6,777,583, made up as follows :

Europeans ...	...	...	...	...	738,937
Bantu ...	...	...	...	...	5,277,023
Asiatics ...	...	...	...	...	183,771
Other races ...	...	...	...	...	577,852

The non-European races outnumber the European in a ratio of three and a half to one.

Industries.

AGRICULTURAL.—

	Total Production.	EXPORTS.		Total Exports expressed as Percentage of U.K. Con- sumption.
		Total.	To U.K.	
Maize ...	1,250,000 tons	435,000 tons	200,000 tons	25
Sugar ...	212,000 tons	47,000 tons	45,000 tons	2
Cotton	5,700,000 lb.	5,120,000 lb.	4,000,000 lb.	0.3
Wool ...	See Note on next page			16

Maize.—Maize production is one of the principal industries of the Union, and constitutes a considerable percentage of the total exports. The maize zone in the Union possesses a longer growing season than is usually found elsewhere, and the dryness of the climate also produces a type of maize less liable to damage in transit. The Transvaal is at present the principal producing area, but it could be extensively cultivated in the Orange Free State and parts of the Cape Province.

Sugar.—Despite severe foreign competition, the cultivation of sugar has made considerable progress, particularly in Zululand. Natal is the principal producer, having 166,000 acres under cultivation as against 90,000 acres in Zululand. Approximately 120,000 acres in Natal and Zululand are capable of cultivation.

Cotton.—Cotton was not successfully produced in the Union until 1910, since when constant progress has been maintained. Areas in the Transvaal and Natal are ideal for cultivation, and the future is believed to be very promising. Very large areas in the middle and low veld are suitable, and in Griqualand West and along the Orange River. The increase of cotton growing in South Africa is of imperial importance in view of the shortage of Empire supplies.

Wool.—Wool production is the oldest and most important of the agricultural and pastoral occupations of South Africa. Accurate statistics of production are difficult to obtain, but the average annual export of wool, of which 50 per cent. is to the United Kingdom, represents approximately 16 per cent. of the total consumption of Great Britain.

MINERALS.

The Union of South Africa is undoubtedly exceptionally rich in many metals, though the success attending the early operations in gold, diamonds and coal has led to the neglect of other metals. Within recent years greater attention has been paid particularly to the base metals, and production, though still small, is increasing, though the heavy falls in prices realized for base metals, especially for copper, has caused a setback.

Gold production, principally in the Witswatersrand district round Johannesburg, averages annually about 10,000,000 fine ounces, of an approximate value of £44,000,000, constituting 53 per cent. of the world production.

The value of the diamond output is approximately £10,000,000 annually. The chief centres of the industry are round Kimberley (Cape Province) and near Pretoria (Transvaal) at the famous Premier mine.

Coal has played an important part in the development of South Africa, particularly in the mining industry. Production averages about 13,000,000 tons annually. Coal occurs in all the provinces, but the best coal is found in Natal. A considerable export and bunker trade is done from the ports of Cape Town and Durban.

Copper and tin are produced in Namaqualand (Cape Province), the Transvaal and Natal. The fall in the price of the metals has adversely affected the industry. Tin is produced in the Cape Province, the Transvaal and Swaziland. Tin occurs over wide

areas, and is difficult to locate. A tin-smelting industry was started during the war, but has since been abandoned.

INDUSTRIES.

The industries of South Africa have rapidly expanded in recent years. As in the other dominions, the manufacturing industries are mainly concerned with the handling and working up of the primary products and with the manufacture of commodities entering into the normal life of the community. The total number of employees in factories is about 200,000, which is about half the number employed in Australia.

6. Communications.

As in Africa in general, good ports are infrequent. The most important harbours are Cape Town, Port Elizabeth and East London, Durban. Beira and Lorenzo Marques, both in Portuguese territory, are the natural outlets for Rhodesia and the Transvaal respectively. Much coastwise traffic passes through the various ports, as railway connection is on the whole round-about.

In 1910 the various lines operated by the separate colonies were amalgamated under one Government system. The total mileage operated at present is 12,880 miles, eleventh-twelfths being 3 ft. 8 in. gauge.

Engineering difficulties, such as for instance were encountered in Canada in the Rockies, do not exist in South Africa, and the climb from the lowland plains to the upper plateau is obviated by the utilization of the natural breaks. The difficulties presented by the rivers have been overcome by bridge construction replacing the old drift crossings.

The most important railway lines of the system are as follows :—

(1) From Cape Town, through Worcester, Beaufort, De Aar Junction, Kimberley, Vryburg, Mafeking to Bulawayo in Southern Rhodesia. Thence, turning north-east, it crosses the Zambesi at Livingstone through Broken Hill, and terminates at Bukhama, in the Belgian Congo.

(2) From Port Elizabeth connection is effected with the former system at De Aar. From Rosemead Junction, before De Aar is reached, the line runs via Bloemfontein and Kronstad to Pretoria. Thence it continues via Pietersburg to the Limpopo, and will ultimately link up at Bulawayo with the first-named system.

(3) From East London junction is effected with the above at Springfontein.

(4) From Durban a line runs via Ladysmith, joining the main line (2) at Johannesburg.

(5) From Lorenzo Marques (Portuguese East Africa) to Johannesburg and Pretoria. Through Lorenzo Marques the quickest connection between India and South Africa can be effected.

(6) From De Aar via Prieska, Upington, Kâlkfontein, Sechem, Windhoek, Walvis Bay. From Sechem a line extends to Luderitz Bay.

(7) A short line from Port Nolloth to the copper mines at Springbok.

It should be noted that in general the railway systems have been designed to connect up the main agricultural and mineral areas with the nearest coastal towns. The general lack of agricultural and other wealth on the western border has naturally resulted in a dearth of railway communication. The railways have, therefore, a general north-south direction. This has necessitated longer sea transit between the east coast ports of the Union and the United Kingdom. The line now under construction from Benguela (Portuguese Angola) will provide the nearest outlet for the increasing mineral wealth of Northern Rhodesia. (See also Appendix A, Chapter XI, page 199.)

Communications by Air.

The arrangements for the establishment of an air route between London and Cape Town are noted in Chapter XVIII. Apart from this, the Administration of South Africa entered into a contract with Messrs. Junkers for a combined mail, passenger and freight service between Windhoek and Kimberley as from April 1st, 1931. Air communication is to be maintained to all parts of the territory, and arrangements have been made to link up with the Imperial Airways service to the Cape.

7. Defence Forces of the Union of South Africa.

The South African Defence Act provided that the Defence Forces (naval, military and air) are all under the control of one Government department of Defence. The Minister of Defence is advised and assisted by a Council of Defence composed as follows :

President	...	The Minister of Defence.
Secretary	...	The Secretary of Defence.
Members	...	Four non-official members, usually possessing military experience, and appointed by the Governor-General.

Every citizen between the ages of 17 and 60 is liable to personal service. Citizens between the ages of 17 and 25 not entered for service in the Active Citizen Force are obliged to undergo training for four years as members of a rifle association.

The Defence Forces are organized as follows :—

- (a) The South African Permanent Force.
- (b) The Active Citizen Force.

The Permanent Force is composed of field and garrison artillery, medical, veterinary and other technical and administrative units. The union is divided into six military districts with headquarters at Cape Town, East London, Durban, Johannesburg, Pretoria and Bloemfontein.

The South African naval service comprises the South African Division R.N.V.R., two mine-sweeping trawlers and one surveying sloop. The units are administered by the Commander, South African Division, under the Commander-in-Chief, Africa Station. Headquarters is at Simon's Town.

South African Air Force.

The South African Air Force is quartered at Roberts Heights, Pretoria, and consists of—

- (1) An Aircraft Depot, for the construction, repair and maintenance of machines and engines and for the provision of technical stores.
- (2) A flying training school.
- (3) One active service squadron.
- (4) A special reserve of pilots.
- (5) An active citizen force unit in which university graduates are trained for the special reserve.
- (6) A reserve of mechanics.
- (7) An active citizen force unit for the training of apprentice mechanics for the above.

The permanent active service squadron, in addition to its military duties, carries out air survey and photography in co-operation with Government departments.

Over one hundred landing grounds have been prepared throughout the Union, and any part of South Africa can be reached within one day from Pretoria. Considerable assistance has been rendered by the S.A.A.F. in keeping open the air routes used on the service flights from Cairo to the Cape, and active co-operation between the S.A.A.F. and the R.A.F. in Egypt has been maintained.

SUMMARY OF THE DEFENCE CONTRIBUTIONS OF THE UNION OF SOUTH AFRICA.

		<i>Permanent—</i>		<i>Active Citizen Force.</i>	
		<i>Officers.</i>	<i>Other Ranks.</i>	<i>Officers.</i>	<i>Other Ranks.</i>
Army	...	125	1,014	401	7,728
S.A.A.F.	...	28	265	—	—

Total appropriation in money—£928,000.

During the General War, 1914-1918, including 28,000 coloured labour personnel, 221,500 men of military age undertook military service.

8. The Defence of South Africa.

The defence of South Africa may be most conveniently divided into two sections—

- (a) That dealing with internal security ;
- (b) That dealing with wider problems of Imperial defence.

The question of internal security is complicated by the facts sketched in the historical survey and by those disclosed in the most recent census figures.

There has always existed a considerable body who desire independence from British control, and a second body who desire to retain the British connection. The differences between these two bodies seem likely to be settled by constitutional means. The second factor is the colour problem in South Africa. The native races outnumber the European by roughly four to one. Though increasing in numbers, they are not organized, and any active rebellion on a large scale is unlikely. The presence of large numbers of Indians, who hold a large share of the retail trade, has led to complications between the Union Government and the Government of India.

A settlement of the native problems of the Union could probably be found in the establishment of native reserves and by a policy of making the native a "better African."

Imperial Defence.

The strategic importance of South Africa has long been recognized. As one of the main land bulwarks of the Empire, it safeguards the western entry into the Indian Ocean, and is also a half-way house on the route to Australia.

A study of the figures of the average distances between Bombay, Cape Town, Halifax (Nova Scotia), Melbourne and Southampton—

five embarkation ports from the Empire's chief recruiting bases—shows the following :—

From Cape Town to Bombay, Halifax, Melbourne, Southampton—average distance, 5,617 miles.

From Bombay to Cape Town, Halifax, Melbourne, Southampton—average distance, 5,962 miles.

From Southampton to Cape Town, Halifax, Melbourne, Bombay—average distance, 6,365 miles.

From Halifax to Cape Town, Melbourne, Bombay, Southampton—average distance, 7,248 miles.

From Melbourne to Cape Town, Bombay, Halifax, Southampton—average distance, 8,662 miles.

It will thus be seen that South Africa is the most central of all the great recruiting bases of the Empire.

The strategic importance of South Africa was clearly recognized by Germany, who attempted to drive a corridor across Africa from Tanganyika (German East Africa) to the Cameroons. This would have provided adequate connected bases upon both the Atlantic and Indian Oceans. In the same way German South-West Africa offered an opportunity to Germany of influencing the Boer republics of the Orange Free State and the Transvaal, but when these were incorporated in the Commonwealth this territory still acted as a flanking position threatening the stream of shipping that passes the Cape—a stream which would have been much multiplied in the event of the Mediterranean route being closed.

The Cape also occupies a strategic position in further respects. Ships entering the Indian Ocean must turn at the Cape, and a fleet based on the Cape occupies the pivotal point and can operate on shorter lines, however wide a turning movement be made. Ships *en route* to Australia likewise cannot go very far wide of the Cape, as no harbours or ports of call present themselves. The fact that from Cape Agulhas for a thousand miles up either east or west coast all ports are British makes it impossible for enemy ships to avoid a close approach to the Cape.

As an air port for airships, South Africa may prove important. Ships going to Australia would, after refuelling at the Cape, enter the "Roaring Forties" and derive considerable assistance from the prevalent westerly winds of that region. An airship route down the east coast of Africa would probably have Durban as the last port of call before crossing to Australia.

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CHAPTER X

THE IRISH FREE STATE

IN 1922 the Irish Free State Agreement Act embodied the principal terms of a treaty which had previously been signed by the British Government and representatives of "Southern" Ireland. Ireland has the same status as the other Dominions, and occupies a position in relation to the Imperial Parliament similar to that occupied by the Dominion of Canada.

The Government is composed of a Governor-General appointed by the King, a senate of sixty members elected for nine years, one-third retiring every three years. The House of Deputies (the Dail), numbering 153, are also elected, for five years. The Free State is represented abroad in Washington, Berlin, Paris and the Vatican.

The total area of the Irish Free State is 17,024,000 acres, and the population 2,971,992.

Agriculture and fishing are the principal occupations of the people, the exports of agricultural produce to the United Kingdom constituting the bulk of the commerce of the country.

The Irish Free State undertakes its own internal defence, the defence force numbering about 6,500 all ranks.

In accordance with the terms of the Treaty, Imperial Forces are responsible for coastal defence.

Expenditure for defence is approximately £1,500,000.

CHAPTER XI

BRITISH POSSESSIONS IN AFRICA

1. Main Physical Features of the African Continent.

THE African continent is composed of a vast plateau, highest in the south and east and descending more gently towards the west.

The four great rivers of the continent—the Nile, the Zambesi, the Congo and the Niger—find their way from this inland plateau to the sea, passing over rapids and cataracts in their course.

One other general feature remains to be noticed. The plateau country, for nearly 6,000 miles in a rough north-easterly direction from Lake Nyasa to the Jordan Valley, has been subjected to some vast upheaval of nature, resulting in a great rift. This depression in places attains a depth of a mile and is fifty miles in breadth, the sides being thickly forested, and at the bottom lie a number of lakes, mostly salt, having no outlet to the sea. A similar rift branches westward of Uganda, containing Lakes Albert and Edward, from which the White Nile derives. Between the rift valleys lies Lake Victoria.

The tropical lands of eastern Africa may be roughly divided into three main regions :—

- (a) A low-lying coastal fringe of high temperature and great rainfall ;
- (b) The higher inland plateau rising up to about 5,000 feet ; and
- (c) The upper plateau rising up to about 8,000 feet.

British possessions on the East Coast may be regarded as a series of terraces running down from the high land to the Indian Ocean, cut across from north to south by the great rift valley.

The West Coast territories consist only of the lowland plain, rising to a plateau some 2,000 feet above sea-level.

The African continent was relatively unknown till towards the end of the last century. The coast line bordering the Mediterranean has, however, been known since the earliest antiquity ; the Cape was used as a halting-place on the long voyage to India, but the interior awaited discovery till a much later date.

There were several fairly obvious reasons for this. The continent runs north and south rather than east and west, and in

consequence, from the point of view of the early voyages of discovery, led nowhere in particular.

In relation to its size it possesses a small coast line, ill-provided with suitable harbours; its rivers are unsuitable for navigation, and its climate largely unhealthy and fever-stricken. There are also few islands off the African coasts which would serve as "jumping-off" grounds for inland exploration.

Though the continent as a whole presented few obstacles to inter-communication, practically none existed, America being more intimately connected with West Africa, through slavery, than West Africa was with the rest of the continent. Eastern Africa has since ancient times been closely connected with the Far East and Arabia.

The dependence of Europe upon the tropics for the supply of raw materials essential for her manufacturing industries, together with the new means of transportation which made the development of Africa commercially profitable, led during the last decades of the nineteenth century to a partition of Africa among the principal European Powers.

Since the General War, Germany has ceased to hold any territories in Africa. These ex-German lands are now held as mandated territories by various European Powers and by the Dominion of South Africa, acting on behalf of the League of Nations. The mandatory system and the mandated areas are referred to in Appendix B, Chapter II, p. 26.

British possessions in Africa, other than the Anglo-Egyptian Sudan and the Union of South Africa, may for convenience of reference be divided into three sections:—

- (a) The Eastern group: Somaliland, Kenya Colony, Uganda, Zanzibar and the mandated area of Tanganyika.
- (b) South-Central group: Northern and Southern Rhodesia, Nyasaland, Bechuanaland, Swaziland, Basutoland, the mandated area of British (German) South-West Africa.
- (c) The Western group: Nigeria, the Gold Coast, Sierra Leone, Gambia and the mandated area of the Cameroons and Togoland.

2. The Eastern Group.

Somaliland.

Capital, Berbera. Area 68,000 square miles. Population 350,000.

British Somaliland lies between French and Italian Somalilands. The country rises on three plateaux from a low-lying coastal plain. On the upper plateau grasses grow freely after rain. Though the

coastal region of Somaliland lies in the track of the summer south-west monsoon, it is too low-lying to cause precipitation. During this monsoon period the climate is very hot.

Water being difficult to procure, the tribes, of the Hamitic stock, are nomadic, driving herds of camels, goats and sheep from pasture to pasture. Hides, goats, sheep and gum are the principal exports from the two harbours of Zeila and Berbera.

Somaliland, opposite to Aden, would occupy a position of some strategic importance in the hands of a possibly unfriendly Power.

Somaliland acts as a rest station for the Royal Air Force at Aden, a detached flight being stationed in the country and regular reliefs provided.

Kenya Colony and Protectorates.

Capital, Nairobi. Area 245,000 square miles. Population 2,891,000.

The colony lies between the Umba River and the Juba River in Italian Somaliland.

Including the protected area belonging to the Sultan of Zanzibar, the colony stretches back from the coast in a series of terraced plateaux to a distance of 400 miles to its boundary with Uganda. The region lies across the equator in the trade winds belt. The climate is always hot, and there is generally sufficient rainfall.

The elevation of the inland plateau renders the climate suitable for white occupation, though experience is perhaps tending to show that the children of white settlers find the climate difficult during the adolescent period.

On the low-lying coastal plains tropical products are found—rubber, rice, coconuts and sisal hemp.

On the middle plateau the cultivation of cotton is increasing, maize is extensively grown, and coffee thrives where the soil is rich.

On the upper plateau English fruit and cereals are cultivated, and excellent sheep and cattle pastures are available.

Import and export figures for Kenya and Uganda are as follows :—

	<i>Imports.</i>	<i>Exports.</i>	<i>From U.K.</i>	<i>To U.K.</i>
1929	£8,920,000	£7,020,000	37 per cent.	35 per cent.

A constitution adopted in 1925, provides for an Executive Council of 11 members and a Legislative Council of 11 Europeans ; 5 Indian and 1 Arab members are elected, and 1 member nominated to represent African interests.

The Uganda Protectorate.

Capital, Entebbe. Area 110,000 square miles. Population 4,000,000.

The Protectorate of Uganda is bounded on the north by the Anglo-Egyptian Sudan; on the east by a line drawn from Mount Zulia to Mount Elgon and along the west boundary of Kenya Colony; on the south by Tanganyika territory; and on the west by the eastern boundary of the Belgian Congo.

The principal industries are agricultural and pastoral, though some alluvial tin is mined and exported. Cotton-growing is by far the most important industry and is rapidly expanding, exports of cotton amounting in 1928 to £2,475,000. Hides and skins, coffee, cocoa, rubber, oil seeds and timber are also exported. Import and export trade is principally with the United Kingdom.

The constitution provides for Legislative and Executive Councils to assist the Governor, but so far as possible the native chiefs are encouraged to conduct the government of their own subjects.

Steamer services are provided upon Lakes Victoria and Albert, and from the latter descend the Nile to Nimule on the Sudan border, whence a motor road proceeds to Rejaf, the terminus of the Nile steamer service maintained by the Government of the Sudan. Government motor vans also serve the main routes which have been constructed to serve the principal agricultural areas.

COMMUNICATIONS.—As Uganda possesses no sea outlet, the trade of the protectorate passes through Kenya. In consequence, the communications of the two colonies will be regarded as part of a single system.

Mombasa is the terminus of the Kenya and Uganda railway system, but it is likely that Kilindini, on the south-west side of the same island, by virtue of its superior natural advantages, will in time displace the former as the chief port. From the coast the line runs through Voi, Magadi, Nairobi, Naivasha, Nakuru to Kisumu (Lake Victoria). Branch lines from Voi connect with the Tanganyika railway system to Moshi and other branch lines are from Magadi to Lake Magadi (91 miles), Naivasha to Nyeri (127 miles), Nakuru and via Eldoret, Turbo and Tororo to Jinja at the head of Lake Victoria. From Tororo a branch line to Soroti taps the fertile cotton area around Kumi, and from Jinja the line further extends to Namaquasali.

For greater convenience a uniform customs tariff is in operation for Uganda, Kenya and Tanganyika territory.

In addition to the steamer connection from Lake Albert to Nimule, a motor road has been constructed from Nairobi to Mongalla (Sudan).

Tanganyika Territory (Mandated Area).

Capital, Dar-es-Salaam. Area 384,000 square miles.

Population 7,750,000.

The Tanganyika Territory, lately part of the German Empire, is held under mandate from the League of Nations.

Two provinces, Ruanda and Urundi, have been assigned to Belgium, the area of those two provinces being about 20,000 square miles.

The physical features are generally similar to those in Kenya Colony. In the upland plateaux round Kilimanjaro and in the Usumbara highlands the conditions are suitable for white settlement.

The agricultural products are the same as in Kenya, cattle raising being carried on in the uplands, where the tsetse fly is not prevalent. The territory is also rich in minerals of all kinds. A recent press communication states that very large areas of high-grade coal have been discovered in the Tukuyu area north of Lake Nyasa. The bearing of such discoveries upon the industrial life of the East African possessions cannot fail to be very great, as to the present coal has been imported, mainly from South Africa.

The constitution provides for Executive and Legislative Councils.

COMMUNICATIONS.—The Central Railway runs from Dar-es-Salaam via Morogoro and Tabora to Kigoma on Lake Tanganyika; a branch line runs from Tabora to Mwanza at the south of Lake Victoria. A second line also runs from Tanga to Moshi and connects at Kahe with the Uganda—Kenya railway system, and this line is now in course of extension from Moshi to Arusha.

A proposed extension from Tabora into Uganda round the western side of Lake Victoria is also under consideration, a corridor through the Belgian mandated area of Ruandi being allotted to Great Britain for this purpose. To the Belgians is also granted certain rights over the Tanganyika railway and at the port of Dar-es-Salaam.

It has been recently announced in the press that large hydro-electric schemes are shortly to be undertaken, which should materially assist the general development of communications. Large coal deposits also exist.

It has recently been proposed that a new Dominion of East Africa should be formed from the existing colonies of Uganda, Tanganyika and Kenya. While such a suggestion is unlikely to be adopted in the immediate future, the advantages, both political and economic, would be considerable. The present difficult problems of land tenure, communications and native questions generally could be settled on broader lines, and the

prosperity of such a Dominion would be increased by its ability to raise large loans for developmental purposes, as well as by co-operative and co-ordinated scientific research in medical and agricultural spheres, for which admirable arrangements had in the past been made by the Germans for Tanganyika Territory.

It may be noted here that a system of annual conferences of the Colonial Governors has already been established.

The Protectorate of Zanzibar.

Area, including Pemba, 1,020 square miles. Population 216,000.

The islands of Zanzibar and Pemba are important from two points of view.

The port of Zanzibar is a naval coaling station and a port of call for the steamship lines *en route* for the East Coast ports of the Union of South Africa. The islands also yield practically the entire world supply of cloves. The inhabitants are very mixed, the Arabs being the richest class.

3. The South-Central Group.

The territory of Northern and Southern Rhodesia extends from the Limpopo River in the south to the Belgian Congo and Tanganyika Territory in the north. To the west lies Portuguese West Africa, and to the east Portuguese East Africa and Nyasaland.

Northern Rhodesia.

Capital, Livingstone. Area 290,000 square miles. Population 1,261,000.

The territory is composed of a high plateau, being as a whole suitable for white settlement. Farming occupies the greater number of European settlers; mixed farming—cotton, tobacco, and cattle breeding being the most important.

Extensive mineral deposits are known to exist, but are relatively undeveloped. Lead and zinc are produced at Broken Hill and copper at Bwana Mkubwa. Gold and silver have been discovered, and coal exists in quantity but is not extensively worked. Recently considerable advance has been made in the production of copper.

In 1924, by Order in Council, the office of Governor of Northern Rhodesia was created. The Governor is assisted by an Executive Council composed of four nominated official and five nominated unofficial members. Provision was at the same time made for a Legislative Council.

Livingstone is the capital, through which passes the main line from Bulawayo. The line connects with Broken Hill and Bwana Mkubwa before passing into Belgian territory. The proposed branch line from Kambore (Belgian territory) would be of material assistance to the future development of this rich territory.

Southern Rhodesia.

Capital, Salisbury. Area 149,000 square miles. Population 1,032,000.

Southern Rhodesia is a well-watered country enjoying a temperate climate, and is suited for mixed farming and cattle raising. Maize constitutes the staple crop, but cotton of excellent quality is increasingly grown. Tobacco, rubber and citrus cultivation is successfully carried out.

Coal, gold, zinc, lead and asbestos are also mined. A number of minor industries are also developing.

The main line from the Cape passes through Bulawayo and passes on through Northern Rhodesia. A line from Bulawayo through Salisbury passes into Portuguese territory, terminating at Beira on the coast.

In 1923 the territory of Southern Rhodesia was formally annexed to the British Dominions, and responsible government, consisting of a Legislative Council and Legislative Assembly, instituted. Union with the Union of South Africa was refused on a referendum of the people.

Nyasaland.

Capital, Blantyre. Area 40,000 square miles. Population 1,200,000.

The Protectorate of Nyasaland lies along the western shore of Lake Nyasa, extends southwards into the triangle formed by the Zambesi and Shire Rivers. To the north it is bounded by Tanganyika and to the west by Northern Rhodesia.

There are two distinct climates in the Protectorate—the low-lying area of the Shire Valley and Lake Nyasa; and, secondly, the Shire highlands and the rest of the country which has a high elevation. The Shire highlands are the most important areas of the country, enjoying a pleasant climate and ample rainfall.

The chief products are tobacco, tea, rice, maize and wheat. Cotton cultivation has rapidly increased.

Through connection between Blantyre and Beira is maintained by a railway from the capital, via Port Herald, to Chindio, on the Zambesi, in Portuguese East Africa. From Muraca, on the southern bank of the Zambesi, a line of the same gauge (3 ft. 6 in.) is continued to Beira. It has recently been decided to proceed with the construction of a bridge over the Zambesi to connect

the existing railway system. The construction of the bridge and connecting railway, which is expected to take at least three years to complete, will secure direct communication between Nyasaland and the port of Beira.

At the same time an extension of the railway to tap Lake Nyasa, which has hitherto been without railway communication to the coast, is being begun. A new company, Nyasaland Railway Limited, has been formed to carry out these schemes.

In addition, the Government of Nyasaland are undertaking the improvement of the roads of the Protectorate and of the steamship services on Lake Nyasa. The total cost of all these enterprises, including the construction of the bridge and approach railway, is expected to amount to about £3,250,000.

A considerable development of the country should follow these proposed increases in transport facilities.

A road suitable for light motor traffic has been constructed from Salisbury (Southern Rhodesia) via Tete, in Portuguese East Africa, to Blantyre.

Swaziland.

Capital, Mbabane. Area 6,700 square miles. Population 112,000.

By Order in Council, 1906, the authority over Swaziland was conferred upon the High Commissioner for South Africa. The territory lies at the south-eastern corner of the Transvaal.

Agricultural products include cotton, tobacco and maize. Grazing land is among the best in South Africa, sheep in large numbers being brought in the winter from the Transvaal.

Considerable mineral deposits are known to exist, but are not worked to any extent. Alluvial tin is mined and exported. A daily motor service is maintained by the South African Railways. Elsewhere communication is by carts, donkey packs or runners.

Basutoland.

Capital, Maseru. Area 11,000 square miles. Population 500,000.

Basutoland, an elevated plateau, forms an irregular parallelogram on the north-east of Cape Province. The territory is well watered and has a fine climate. It possesses excellent agricultural grain-bearing land.

The territory is governed under the authority of the High Commissioner for South Africa.

There are no navigable waterways, and communication is by motor car, ox waggon or light cart.

A short stretch of railway connects Maseru with the South African railway system at Westminister (Orange Free State).

Bechuanaland Protectorate.

Capital, Mafeking. Area 275,000 square miles. Population 152,000.

The territory of Bechuanaland is bounded on the north by Southern Rhodesia, on the west by British South-West Africa, and to south and east by the Union of South Africa.

The Protectorate is administered by a Resident Commissioner under the authority of the High Commissioner for South Africa.

The principal occupation is grazing. A small amount of gold and silver is mined.

The main trunk line from Cape Town runs through the Protectorate to Northern Rhodesia.

The Mandated Territory of German South-West Africa.

Capital, Windhoek. Area 311,000 square miles. Population 230,000.

The mandated territory of German South-West Africa is bounded on the north by Portuguese West Africa, on the west by the Atlantic, on the east and south by Bechuanaland and the Cape Province.

It was acquired by Germany in 1884 and surrendered in 1915. It was allotted as a mandate to the Union of South Africa by the League of Nations in 1920.

The territory includes part of the Kalahari desert. The southern half of the territory is suitable for stock raising; agriculture, owing to lack of rain, being practically impossible.

Diamonds are found along the coast and are exported to a value of over £1,000,000 yearly. Copper, tin and vanadium are also mined.

A railway line from De Aar junction (Cape Province) via Kalkfontein terminates at Walvis Bay. A short line running from Luderitz, the centre of the diamond industry, connects with this line.

The future prosperity of the territory appears to be bound up with its development as an entrepôt for the trade of the Central African provinces, particularly Northern and Southern Rhodesia.

The construction of railway communication between Swakupmund (Walvis Bay) and Northern Rhodesia would materially shorten the distance between this territory and the United Kingdom and obviate the use of Beira, which is not in British territory. It is also suggested that Walvis Bay may be utilized as an air entry port for the Union, an air line^a being projected thence to Durban via Johannesburg.

4. The Western Possessions.

Nigeria.

Capital, Lagos. Area 340,000 square miles. Population 19,000,000.

The Colony and Protectorate of Nigeria is situated in the Gulf of Guinea. North and north-west it is bounded by French Sudan, east and south-east by the Cameroons, south and south-west by the Gulf of Guinea, and west by French Dahomey.

The whole territory may be divided into four areas :—

(1) An area of swamp and almost impenetrable forest undergrowth, running parallel to the coast line and having a depth of between 20 and 60 miles.

(2) An area of dense forest running from the western to the eastern boundaries, lying roughly along the boundary line between Southern and Northern Nigeria. The country is undulating, levels of 3,000 ft. being reached towards the Cameroons border. The area is well watered and is rich in palm oils.

(3) An area of comparatively open country, gradually opening out into the undulating park-like land of the watershed of the River Benue. Towards the Cameroons heights of over 6,000 ft. are reached.

(4) A plateau occupying the greater part of Nigeria north of the Rivers Niger and Benue. The plateau is undulating save in the Bauchi area, where heights of 6,000 ft. occur. The country northwards is mainly covered with thin forests, becoming scantier as the western Sudan is reached.

The climate of West Africa, within which may be included Nigeria, has always been reckoned unhealthy, but it is now found not to be excessively so for Europeans during temporary residence.

The coast receives heavy precipitation, 150 inches per annum having been recorded. The rainfall decreases towards the interior, 43 in. being recorded.

ADMINISTRATION.—The two provinces are administered by Lieutenant-Governors under the control of a Governor, who is assisted by a nominated Executive Council and by a Legislative Council, partly nominated and partly elected.

RESOURCES.—The principal exports are palm-kernels and palm oil to the value of £7,500,000 ; cocoa, £2,000,000 ; ground nuts, £1,500,000 ; tin ore, £2,000,000 ; cotton lint, £300,000.

The areas in which alluvial tin is found are very extensive. The tin is most readily found in the river beds, increasing in richness the nearer the approach is made to their sources. The Bauchi area near Bukuru is best known, but tin is known to exist in large areas elsewhere, though it is not as yet extensively mined.

Considerable deposits of hard and brown coal exist, and the colliery at Energue, worked by the Government, produces about 200,000 tons annually.

Northern Nigeria is particularly suited to the growth of cotton. The Cotton Growing Association considers that the future prosperity of the territory is bound up with this industry.

COMMUNICATIONS.—The principal ports served by ocean steamers are Lagos, Forcados, Burutu, Warri, Sapele, Brass, Port Harcourt, Deguna and Calabar. Regular European steamship services are maintained through Lagos and Calabar.

Engineering and repair workshops are established at Calabar and Lagos. At Lagos considerable dock extensions are taking place, and the harbour may become an important naval base.

The railway system comprises :—

(1) A western line (gauge 3 ft. 6 in.) from Lagos via Abeokaba and Kaduna and Zaria (a cotton centre) to Kano; the Niger is crossed by bridge at Jebba. Branches have been constructed from this line from Minna to Baro and from Zaria to Bukuru (the centre of the tin fields).

(2) The eastern line (3 ft. 6 in. gauge) from Port Harcourt to Kaduna on the western railway, crossing the Benue at Makandi by train ferry. A branch line connects the eastern line with the tin fields in the Jos area. The eastern line passes through Energue, enabling the output of the colliery to be railed to Port Harcourt.

COMMUNICATION BY RIVER, ETC.—A large trade with the western Sahara and the Lake Chad and Wadai districts passes through Kano. The numerous rivers and creeks form the principal means of transport, and the Niger carries a considerable volume of traffic to the ports of Brass and Akassa. The development of the traffic facilities of the whole territory has resulted in a great growth of general prosperity, though the figures of the "boom" years of 1919-1920 have not subsequently been recovered.

NIGERIAN DEFENCE FORCES.—The headquarters of the Nigerian Regiment is Kaduna.

The Gold Coast.

Capital, Accra. Area 80,000 square miles. Population 2,000,000.

The Gold Coast Colony, with which is included Ashanti and the Northern Territories, is situated in the Gulf of Guinea. To the north lies French Sudan, to the east French Togoland, and to the west the French colony of the Ivory Coast.

The colony, including Ashanti and the mandated area of Togoland, is administered by a Governor assisted by an Executive and Legislative Council.

Ashanti (capital, Kumasi) and Northern Territory (capital, Tamale) are administered by a Commissioner under the authority of the Governor.

As in Nigeria, there is a low-lying coastal strip, rising towards the interior, which is densely wooded. Towards the north-eastern corner of the colony excellent arable and grazing lands exist.

The chief products of the country are cocoa, gold and man-ganese, palm kernels and oil, timber (mahogany) and rubber.

COMMUNICATIONS.—*Ports.*—External communications with the Gold Coast suffer from the lack of harbours. Accra, the capital, and Sekondi are unsuitable owing to continuous silting.

At Takoradi a deep water harbour, where ships can berth alongside, has recently been constructed and is capable of considerable extension. At Accra and Sekondi surf boats must be used.

Railways.—The principal railway (gauge, 3 ft. 6 in.) runs from Sekondi and Takoradi to Kumasi, with branches to Tarkwa, Prestea and Inchabar. A further line is under consideration from Heni through the central province to Kade in the eastern province.

The principal waterway is the Volta, which is suitable for light launches. The colony is also well provided with roads, 1,600 miles of main and 3,000 miles of secondary roads being maintained. A motor transport service is also maintained by Government.

There is a wireless station at Accra.

Sierra Leone.

Capital, Freetown. Area 27,000 square miles. Population 1,600,000.

The colony and protectorate of Sierra Leone, lying between French Guinea and the Liberian Republic, occupy an area roughly circular in shape.

Exports consist of palm kernels and oils, coconuts, ginger and kola nuts.

COMMUNICATIONS.—Freetown, the principal town, is the finest port in Africa and a second-class coaling station. Its position gives it considerable strategic importance, flanking the main sea routes to the Cape.

A single track (2 ft. 6 in. gauge) railway runs from Freetown to Pendembu on the Liberian border.

Freetown is the headquarters of H.M. Forces in West Africa, and Wilberforce (Freetown) is the headquarters of a battalion of the West African Frontier Force.

Communication with the United Kingdom is maintained thrice monthly.

Gambia.

Capital, Bathurst. Area 4,000 square miles. Population 200,000.

Hides and skins, palm kernels and oils are the principal exports.

Bathurst, the capital, is connected by cable with St. Vincent (Cape Verde) and with Freetown, Sierra Leone and by wireless with the interior. A detachment of the West African Frontier Force is stationed at Bathurst.

The Mandated Areas of the Cameroons and Togoland.

(1) **THE CAMEROONS.**—The ex-German colony of the Cameroons was captured in 1916 by joint English, French and Belgian efforts.

In subsequent arrangements between Great Britain and France the territory was divided so as to improve the eastern boundary of Nigeria and to obtain for France an outlet to the sea from the Lake Chad area.

Lying between Nigeria and the French Congo, the Cameroons stretches from the coast to Lake Chad.

The territory contains an area of 35,000 square miles, and the population is approximately 700,000.

The coast region is fertile. The principal products are palm kernels and oils, cocoa and coffee.

(2) **TOGOLAND.**—The German colony of Togoland was allotted to France and Great Britain as a mandate. The total area, some 13,000 square miles, possesses no outlet to the coast and is attached to the adjacent colony of the Gold Coast.

The Germans had developed with considerable success the cultivation of cotton, which, with palm kernels and oils, and cocoa, constitutes the principal exports.

APPENDIX A.

COMMUNICATIONS IN AFRICA.

It is no less than a simple statement of truth to say that the railways have been and continue to be the key which unlocks the tropics. True as this is of all tropical areas, it is more true of Africa than any other continent. The rivers of Africa are peculiarly unsuited for transportation, as many are closed by rapids or navigable for part of the year only. Before the railways appeared transport depended upon animals and human portage, both unsatisfactory and expensive.

Railways provide cheap transport for bulky goods, and so by giving the inland continental areas a new value for agricultural operations accelerate the expansion of territories which were formerly reckoned valueless by reason of their remoteness from the coasts.

Apart altogether from the part they have played in the economic development of the African continent, the railways have served strategic purposes, assisting at a minimum of cost to preserve order, to lower the general costs of administration and to provide revenue out of operational profits.

The whole position is thus summarized by Sir F. Lugard :—

“The development of the African continent is impossible without railways, and has awaited their advent. A railway reduces administrative expenses in the transport of stores and in the time of officials in reaching their work ; it saves the lives and health of officers ; it reduces the number and cost of troops required for policing the country by increasing their mobility ; it renders direct taxation possible by affording a market for produce and increasing the wealth of the people, it has opened up new markets for British trade ; it has killed the slave trade ; it liberates labour engaged on transport for productive work ; and by proper methods of construction it forms the most valuable of educational agencies for a free labour supply. It has been calculated that one railway train of average capacity and engine power will do the work of 13,000 carriers at one-twentieth the cost.”*

The building of an “all red” Cape to Cairo Railway had for some considerable period exercised the imagination of the pioneers of African development, but the German East African territory appeared to check the realization of such a route.

While the transfer to Great Britain of this territory has brought into being a long corridor down the eastern coast of the continent, more recent events make it not improbable that the northern

* “The Dual Mandate,” Sir F. Lugard. By permission of Messrs. Blackwood.

terminus of such a railway will now lie in territory outside the Empire.

A study of the map will show that the southern and northern sections of such a route are already in existence; the section in the centre is almost entirely incomplete. It also appears that the development of the East African territories is dependent not so much upon a central north—south railway as upon lines running from the central highlands to the coastal harbours. Such a railway, if constructed, would entail great expenditure and could only be employed for express through traffic, bulk traffic continuing to use the “coast” lines already in existence. It is not unlikely that in time such a route may come into being, but it will be rather by the linking up of such “coast” lines than by direct through connection.

A proposed route passing through British territory as far as possible would be as follows:—

Cape Town to Broken Hill (Northern Rhodesia) already in operation; Broken Hill to Abercorn and Bismarckburg (Lake Tanganyika) not yet built; by boat to Ujiji; Ujiji to Tabora (due east) already constructed; Tabora to Mwanza, thence to Entebbe by boat; Entebbe to Rejaf (Sudan) not yet built; Rejaf to Sennar by Nile steamer, and thence via Khartoum into Egypt.

Attractive as the completion of such a railway would be, and its ultimate linking up with a European-Asian system, its commercial and strategic importance could not be commensurate with the tremendous financial outlay involved.

After the railways and the complementary developments in port and harbour facilities, roads are beginning to assume a greater importance from the motor car acting not only as a passenger-moving agent but as a factor in the transportation of agricultural produce. A study of the figures of motor vehicles, tractors, etc., imported annually into the African territories will indicate the growing importance of roads.*

The value of aircraft in speeding up communications in Africa is discussed in a later chapter, but it may here be sufficient to note that aircraft may, rather than the railway, provide that north—south core of communication so as to link up the railways, which speaking generally take an east—west direction from the interior to the coast.

* Within a comparatively short time a new trans-African railway from Lobitos Bay (Benguela) (Portuguese West Africa) to Beira (Portuguese East Africa) will be in operation. This line has already been constructed and is in operation between Benguela and Dilolo on the Belgian Congo border; a Belgian connection from Dilolo with Katanya (the centre of the richest mineralized area in the world) and Elizabethville will be continued south-west and finally connect with the railway from Beira. It is stated that this will shorten the journey from Europe to the Indian Ocean by sixteen days and might, therefore, be of marked assistance to Great Britain in reinforcing the Indian garrisons in case of necessity, being employed in conjunction with the Suez route.

APPENDIX B.

DEFENCE FORCES OF BRITISH COLONIES, ETC., IN
EAST AND WEST AFRICA.

(1) EAST AFRICA.

The King's African Rifles comprise the following battalions stationed as shown below :—

- 1st Battalion, stationed in Nyasaland territory.
- 2nd and 6th Battalions, stationed in Tanganyika territory.
- 3rd Battalion, stationed in Kenya Colony.
- 4th Battalion, stationed in Uganda Protectorate.
- Somaliland Camel Corps in British Somaliland.
- Supply and Transport Corps in Kenya Colony.

The functions of the force are :—

- (i) Defence of the East African Dependencies.
- (ii) Maintenance of Internal Security.

Training is on similar lines to the Regular Army.

Establishments—

<i>Unit.</i>	<i>British—</i>		<i>Native—</i>		<i>Total.</i>
	<i>Officers.</i>	<i>O.R.</i>	<i>Officers.</i>	<i>O.R.</i>	
1st Bn. K.A.R. ...	15	2	—	477	494
2nd Bn. K.A.R. ...	23	3	—	786	812
3rd Bn. K.A.R. ...	44	5	—	1,136	1,185
4th Bn. K.A.R. ...	23	5	3	684	715
6th K.A.R. ...	30	5	—	1,074	1,109
Somaliland Camel Corps	13	2	1	385	401
Supply and Transport Corps, K.A.R. ...	3	11	—	240	254

(2) WEST AFRICA.

The Royal West African Frontier Force comprises :—

- The Gambia Company, stationed in Gambia.
- The Sierra Leone Battalion, stationed in Sierra Leone.
- The Gold Coast Regiment, stationed in the Gold Coast.
- The Nigeria Regiment, stationed in Nigeria.

The functions of the force are :—

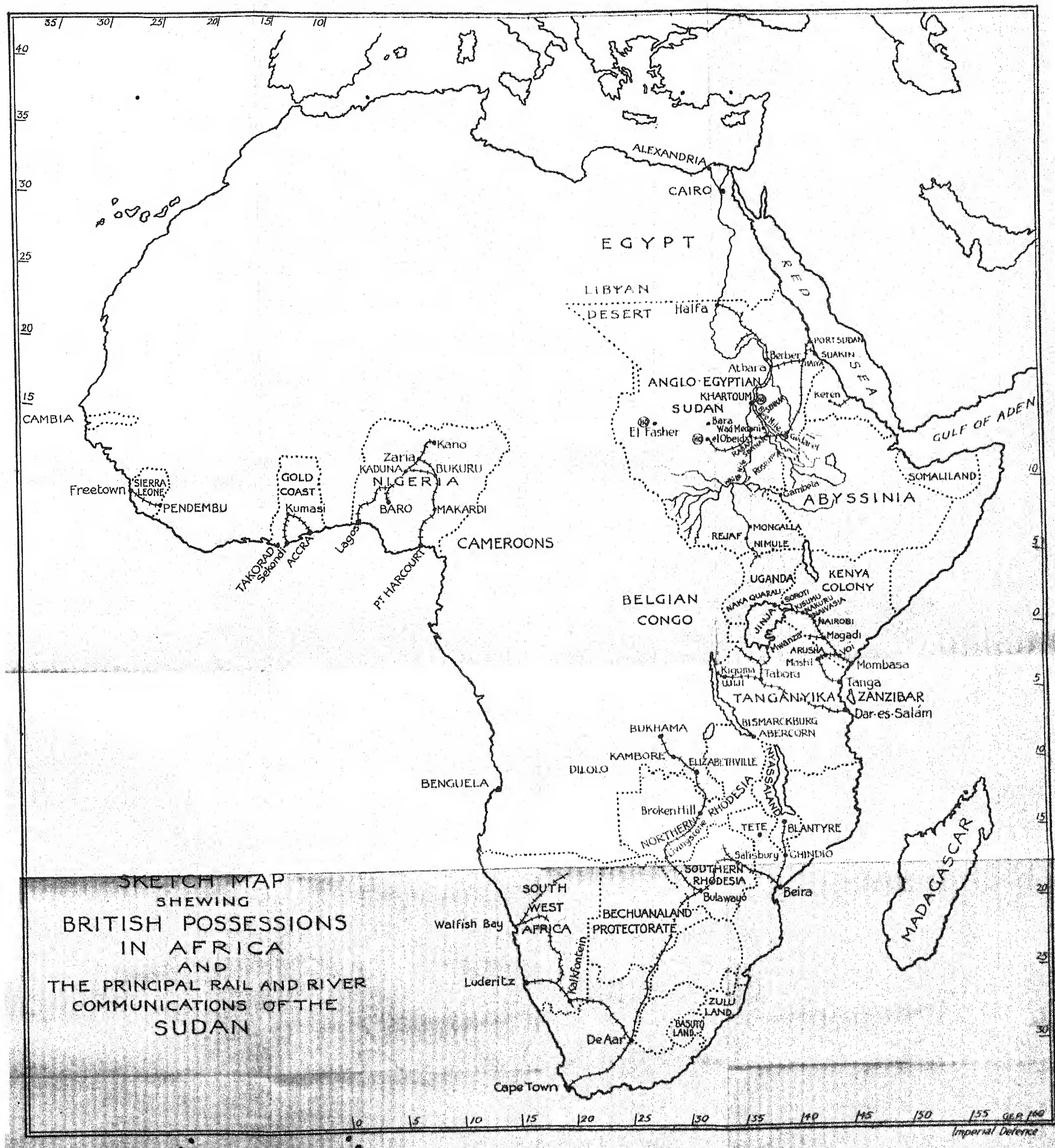
- (i) To preserve internal security.
- (ii) To provide a striking force to deal with inter-tribal trouble or insurrection.
- (iii) To provide a striking force to assist a neighbouring colony in case of necessity.

The training is on similar lines to the Regular Army.

Establishment—

<i>Unit.</i>	<i>British— Officers. O.R.</i>		<i>Native— Officers. O.R.</i>		<i>Total.</i>
The Gambia Coy. (R.W.A.F.F.)...	...	4 3	—	150	157
The Sierra Leone Bn. (R.W.A.F.F.)...	...	15 11	—	369	395
The Gold Coast Regt. (R.W.A.F.F.)...	...	37 29	—	1,071	1,137
The Nigeria Regt. (R.W.A.F.F.)...	...	131 102	—	3,379	3,612

In Northern Rhodesia, Basutoland and Bechuanaland no military forces exist. In Southern Rhodesia a permanent force (British South African Police) is embodied as a police force for the colony, a striking force in case of emergency and to carry out the training of the Citizen Territorial Defence Force. Every citizen between 18 and 60 years of age is liable for combatant service and between the ages of 19 and 22 every citizen is liable to undergo training in the Territorial Active Force.



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CHAPTER XII

ANGLO-EGYPTIAN SUDAN

1. General Physical Features and Climate.

THE Anglo-Egyptian Sudan, a region of North-Eastern Africa, is separated from Egypt by latitude 22° N.; on the east it is bounded by the Red Sea, Eritrea and Abyssinia; on the west by French Equatorial Africa; and on the south by Uganda and the Belgian Congo.

The total area is approximately 1,000,000 square miles.

The Sudan in general terms is a great shallow depression extending from the Great Lakes to the Egyptian boundary. The western limit of this plain is the Nile-Congo watershed and the mountains of Darfur, and on the east the Abyssinian highlands continued in the Red Sea mountains. The plain gradually widens from south to north, and provides the waterway for the Nile and its tributaries.

The country may be divided into three principal zones :—

(1) A desert zone extending from the Egyptian boundary to approximately latitude 18° N. It is an eastward extension of the Sahara Desert.

(2) South of the desert zone and down to the twelfth parallel the intermediate zone exhibits varying features. South of Khartoum the south-west monsoons bring rain during the summer months; farther south tropical conditions of increasing rainfall prevail.

(3) From the tenth parallel to the Uganda boundary full tropical conditions are met. Rain continues from February to November, being especially heavy in spring and late autumn.

The Nile.

Practically the whole of the country is drained by the Nile system, its total length through Sudan territory being 2,000 miles.

The system may be conveniently divided—

(1) THE WHITE NILE.—The Bahr-el-Jebel, draining the Equatorial lake region, and the Bahr-el-Ghazal, draining the Nile-Congo watershed, unite at Lake No to form the White Nile. The White Nile is joined by the Bahr-el-Zeraf and the Sobat, junction being effected at Khartoum with the Blue Nile. The

White Nile is the principal source of the perennial supply of water to the Sudan and Egypt.

(2) THE BLUE NILE.—The Blue Nile drains the area of the Abyssinian tableland. It issues from Lake Tsana. Entering the Sudan at Kira, it unites with the White Nile at Khartoum.

The Blue Nile is the main source of the flood water. The difference between high and low water levels is twenty feet, and the maximum discharge of the Blue Nile at flood periods is 12,000 cubic metres per second. The flood water is heavily charged with fertilizing silt. The flooding of the Sobat, Blue Nile and Atbara occur in the order named, and the combined flood effect of the three rivers is felt at Wadi Halfa in June and in Cairo in late August or September.

The entire prosperity of Egypt and to a lesser extent of the Sudan is bound up with the control of the Nile waters.

Much has been done to increase the supply of water for purposes of cultivation, particularly during the summer period, when the Nile is at its lowest before the annual flood occurs.

The subject of Nile control has long been in dispute between Egypt and the Sudan. The development of the Gezireh Plain, south of Khartoum, between the White and Blue Niles, is stated by Egypt to be calculated to deprive her of much-needed supplies of water. The problem has been the subject of far-reaching study and investigation. It is probable that, as funds permit, the levels of the lakes supplying the Atbara and the Bahr-el-Jebel may be artificially heightened, and the swamps of the Sudd region lying between Nimule and Lake No may be cleared. Under these circumstances, ample supply of water would be available for present uses and for the future expansion of the cultivable areas both of the Sudan and Egypt.

2. Historical Survey.

Every conqueror of Egypt has always regarded the Sudan with a mixture of envy and anxiety. The measure of control exerted over the Sudan from the North was always more apparent than real.

Muhammad Ali, Khedive of Egypt, annexed the Sudan in 1820. Despite repeated enactments against it, slave raiding for nearly fifty years caused the practical extermination of every living being in the Southern Sudan, the presence of General Gordon securing but a temporary cessation of the trade.

In 1881 a certain Muhammad Ahmad declared himself to be the expected Mahdi (Messiah). Securing the adherence of the Baggara tribe, he quickly swept away the Egyptian Army, annihilating 10,000 men under Hicks Pasha at El-Obeid in 1883. It was then decided to abandon the Sudan, General Gordon being

instructed to give effect thereto. In 1885 Khartoum fell, and General Gordon was killed, and in 1886 the boundary between the two countries was fixed at Wadi-Halfa.

The Khalifa Abdulla, succeeding the Mahdi, through untold sufferings to his people which caused the population to shrink from eight to two and a half millions, managed to keep his hold upon them, and was always a possible source of danger.

The defeat of the Italians by the Abyssinians at Adowa was thought likely to react unfavourably in the Sudan, and it was decided to regain the country. This was successfully accomplished between 1896 and 1899, the battle of Omdurman finally dispersing the Khalifa's power. By agreement between Egypt and Great Britain, a form of condominium was established in 1899.

The work of reconstruction has since that time been consistently maintained and appears not incapable of almost indefinite expansion. Within recent years a considerable decentralization and devolution of power has taken place, the native sheikhs being charged with the control of the tribes.

The question of the future of the Sudan has been raised largely as the result of the long-protracted negotiations between Great Britain and Egypt relative to the independence of the latter country.

The Egyptian claim to the Sudan is based upon the long historical connection between the two countries and upon her natural anxiety about the supply of water, taking into consideration the proposed increased use of Nile water in the Sudan.

It is, however, a matter of doubt whether Egypt could control the Sudan without the help derived from the presence of British troops and British officers in native Sudanese regiments. On the other hand, the reconstruction of the country and the capital therein required is due to the British. The development of cotton-growing in the Sudan is as great a source of uneasiness to the Egyptian as it may be of satisfaction to Great Britain.

The Sudan question has been noticeably in the forefront whenever any attempts have been made to settle the future relations between Egypt and Great Britain, and it is not unlikely that the Egyptian Nationalist party have attempted to make political capital from it.

It appears as impossible for Great Britain to abandon the Sudan as it is natural for Egyptians generally to be anxious that the head-waters of the Nile should not pass completely out of their control. There does not appear to be any valid reason why the present system of condominium should not continue in its present form even if the terms of the co-partnership are modified to suit changing conditions, it being obvious that as

the Sudanese progress they will require less the services of subordinate Egyptian personnel, though they will still require British advice.

3. Constitution and Government.

Under the terms of the Convention signed in Cairo in 1899 between the British and Egyptian Governments, it is provided that the administration of the territory shall be carried out by a Governor-General appointed by Egypt with the assent of Great Britain. The Governor-General is invested with full legislative powers, and unless specially promulgated by him, Egyptian legislation does not apply to the Sudan. The Governor-General is assisted by a council.

For administrative purposes the Sudan is divided into thirteen districts, each under the control of a British District Commissioner.

4. Resources.

The principal resources of the country are agricultural and pastoral. The principal exports are gum, cotton, rubber, ivory, cattle and ostrich feathers.

The mineral wealth of the Sudan has not been fully surveyed. Gold, copper and iron are mined, though in primitive fashion. Large deposits of iron are known to exist in the Bahr-el-Ghazal province; lead is found in Darfur. The manufacture of cement has also recently been successfully undertaken.

Cotton, however, is likely to constitute the basis of the Sudan's prosperity.

The Sudan Plantations Syndicate have, in co-operation with the Sudan Government, developed considerable areas in the Gezireh plain, the necessary irrigation system being based upon the damming of the Blue Nile at Makwar. The provision of adequate labour to work the irrigated areas, on a roughly co-operative basis between the Government, the Company and the "squatter," appears to be the only obstacle to the highly successful exploitation of the area. Sudan cotton corresponds to that from Egypt, being long and fine in staple.

5. Communications.

Roads, Caravan Routes, etc.

In the tropical regions of the southern Sudan communication is limited to native tracks and paths, human portage being the sole means of transport.

In the desert region communication is by riding-animals, and the routes follow oases and water-holes.

Road communication is generally designed from a military and economic point of view.

Waterways.

The Nile with its tributaries forms the principal means of communication for the Sudan.

(1) REJAF TO KHARTOUM.—Navigation is possible throughout the year. Government steamers maintain a fortnightly service. From Rejaf communication is maintained with the Belgian Congo, Uganda and Kenya Colony.

(2) KHARTOUM—GAMBELA.—The distance, 874 miles, is covered in about a fortnight. A large and increasing trade with Abyssinia is conducted by this route.

(3) KHARTOUM—WAD-MEDANI—ROSEIRES.—This service, 109 miles to Wad-Medani on the Khartoum—El-Obeid railway, is continued 259 miles to Roseires.

(4) HALFA—SHELLAL (EGYPT).—A distance of 200 miles is covered twice weekly by steamer throughout the year. A large number of intermediate stations *en route* are called at.

Railways.

The total length of line open for traffic is 2,097 miles. There are three main systems :—

(1) KHARTOUM—HALFA.—The total distance approximately, 580 miles, is covered in twenty-five hours, the principal places *en route* being Atbara Junction and Abu Hamed. At Atbara are the workshops and general offices of the Sudan Government Railways.

From Abu Hamed a branch line runs to Kareima and Dongola Province.

Khartoum North station is also the headquarters of the Government steamer service. Docks and wharves have been constructed for the convenient handling of cargoes.

(2) ATBARA—PORT SUDAN.—This line has a total distance of 300 miles. The entire journey from Port Sudan to Khartoum occupies twenty hours.

The opening of railway communication with the Red Sea, obviating a 1,500-mile rail and steamer journey, has proved of great benefit to the Sudan.

(3) KHARTOUM—SENNAR—EL OBEID.—The total distance is about 400 miles, the line passing through Wad-Medani (connecting with the Blue Nile steamer service) to Sennar. From Sennar the line proceeds across the Gezireh Plain, recently developed as the cotton-growing area of the country. At Rabak, near Kosti, the White Nile is crossed and the line terminates at El-Obeid in Kordofan.

The railway has caused considerable development in the trade of Kordofan Province, and will carry the large cotton produce of the Gezireh Plain.

(4) HAIYA—KASSALA—GEDAREF—MAKWAR.—This line joins the Atbara—Port Sudan Railway at Shamian. Its object is to develop the cotton-growing area in the delta of the Gash River. The recent extension to Makwar brings the line back to the Blue Nile.

Kassala Province will benefit by the railway, as it will obviate the previous camel-transport route to Wad-Medani or Suakim.

Ports.

The chief Red Sea ports are—

PORT SUDAN.—Opened 1909. There is a good anchorage at an average depth of 10 to 14 fathoms. There are five quays alongside which vessels can berth, and all the most modern machinery is provided.

Practically all the trade of the Sudan passes through Port Sudan, and it was found that in the first year after its opening the trade of the Sudan doubled.

SUAKIM.—Formerly the chief port of the Sudan, but now carrying only a decreasing local trade.

Motor-Transport Routes.

A motor road has recently been opened between Mongalla and Nairobi and between Rejaf and Aba (Belgian Congo).

Air Routes.

These will be discussed under a general consideration of the African air routes as a whole.

6. The Defence Forces of the Sudan.

The forces in the Sudan consist of—

Military forces	...	The Sudan Defence Force. Sudanese Reserves.
Police	...	...
		Sudan Civil Police.

Military Forces.

THE SUDAN DEFENCE FORCE.—(a) *Historical Aspect*.—Prior to the year 1925, Egypt and the Sudan had been mainly garrisoned by the Egyptian Army. The first Sudanese battalion (9th Sudanese) was raised for service in 1884, and between 1885 and 1888 the 10th, 11th, 12th and 13th Battalions were formed. The

14th Sudanese was raised in 1896, but was disbanded in 1902 and raised again in 1906; and in 1898 the 15th Sudanese came into existence, but was disbanded in 1921. The Cavalry Corps and the Camel Corps were raised in 1883, and subsequently the following units, which are still serving in the Sudan Defence Force, were added:—

Eastern Arab Corps	...	...	...	1916
Sudanese Machine-Gun Battery	...	...	...	1917
Western Arab Corps	...	...	...	1918
Three Motor Machine-Gun Batteries	...	...	...	1919-1925
Engineer Troops	...	...	...	1925
Various Departmental Corps.				

In November, 1924, all Egyptian units were withdrawn from the Sudan.

(b) *Constitution*.—The Sudan Defence Force came into existence on January 17th, 1925, by proclamation of the Governor-General of the Sudan, and in accordance with the Sudan Defence Force Ordinance, 1925.

The approximate percentage of the three main types of soldiers serving in the Force are—

	<i>Per cent.</i>						
Arab	50
Sudanese	30
Equatorial	20

The language used is Arabic.

(c) *Military Areas*.—For military purposes the Sudan is divided into the following areas, which, with the exception of the northern area, are commanded by the officer commanding the corps or unit within the area:—

<i>Area.</i>	<i>Headquarters.</i>	<i>Extent.</i>
1. Northern Area ...	Khartoum	That part of the Sudan not included in the following corps areas.
2. Central Area ...	El Obeid	Kordofan and Nuba Mountains Province, and that part of the Upper Nile Province which lies on the left bank of the White Nile north of Tonga, inclusive.
3. Eastern Area ...	Gedaref	Kassala and Fung Provinces.
4. Western Area ...	El Fasher	Darfur Province.
5. Southern Area ...	—	Mongalla and Bahr-el-Ghazal Provinces, and that part of the Upper Nile Province not in the central area.

BRITISH FORCES IN THE SUDAN.—One British regiment and one squadron of the Royal Air Force are stationed in Khartoum.

7. The Defence of the Sudan.

For the past thirty years the Sudan has enjoyed practically uninterrupted peace. Tribal warfare has greatly diminished; religious fanaticism, save among certain tribes, no longer leads to disorder; no enemy has attacked from outside. On the Abyssinian border unrest is still prevalent. The Sudan Defence Force is, therefore, largely a police force.

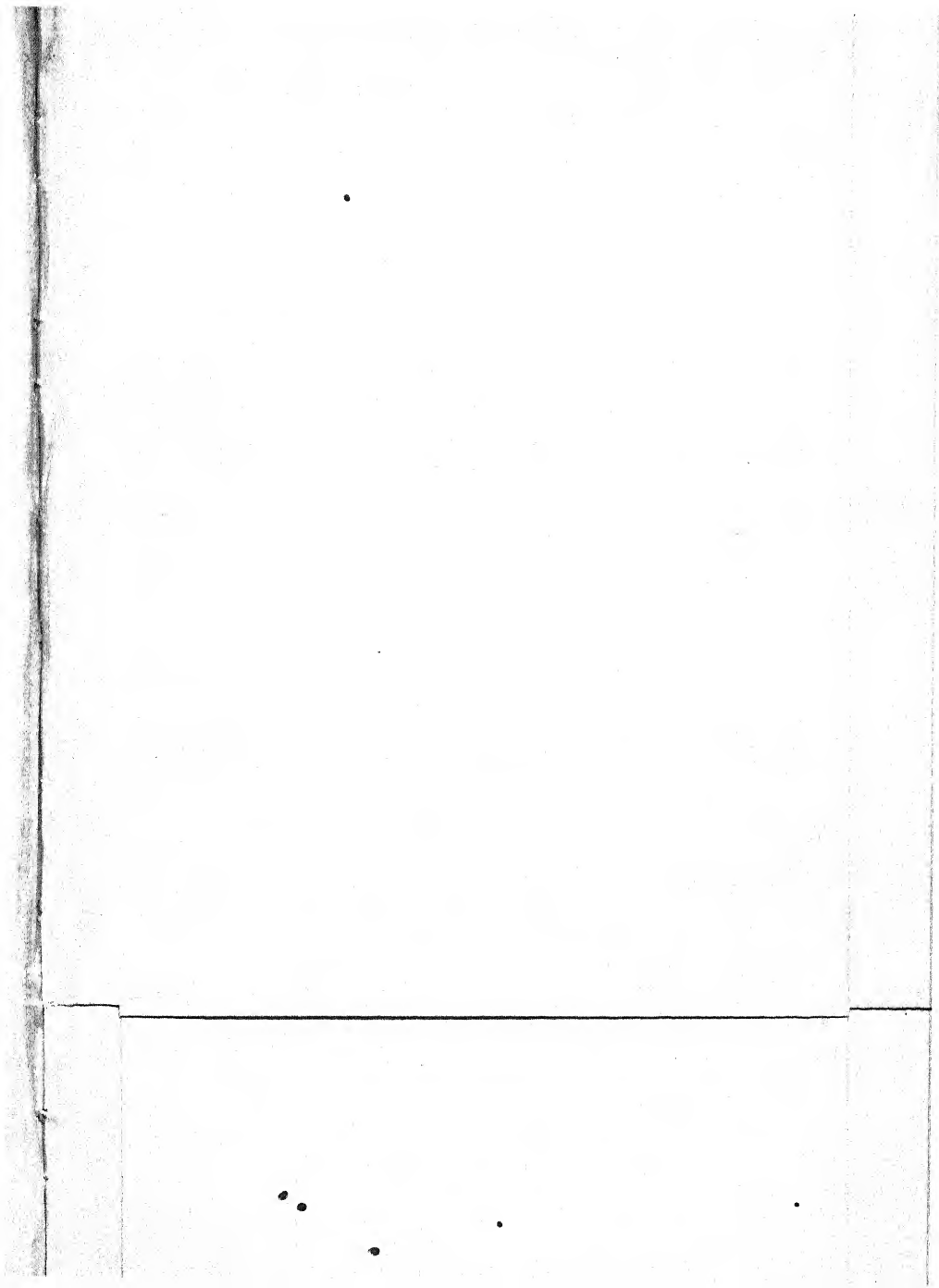
On the west the Sahara, on the south the Belgian Congo and Uganda, on the north-east the Nubian Desert, form defensive barriers of great strength. The only section of the entire boundary-line of the Sudan that presents any possibility of difficulty is the Abyssinian.

The independence of Abyssinia being at present guaranteed by the European Powers, it appears unlikely that the Abyssinians would jeopardize their freedom by interfering in the affairs of a neighbour.

The present isolation of Abyssinia is in the not-far-distant future likely to be disturbed for the reason that the future development of the Gezireh Plain depends ultimately upon the control of the waters of the Blue Nile. This control can most effectively be carried out at Lake Tsana in Abyssinia itself.

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• CHAPTER XIII

THE EMPIRE OF INDIA

THE Indian Empire will in this chapter be regarded from two points of view. In the first place, it will be considered as a contributory member of the Commonwealth, providing for its own local defence and organized to render effective assistance overseas ; in the second place, it will be regarded as an area of responsibility in that its defence against external aggression is a task which at present the Indian Army is unable to fulfil without the assistance of British regiments.

1. General Physical Features and Climate.

The Empire of India extends over a territory larger than Europe without Russia. "British India" is that part governed by the King-Emperor through the Governor-General of India. "India" includes British India and the Native States or territories under the suzerainty of the King. To the north-west and north-east are territories included in the political, but not the administrative, spheres of the Indian Government.

The boundaries of the area above described run from the Gulf of Oman along the boundaries of Persia and Afghanistan to the Pamirs. There the boundary touches the Chinese Empire and Nepal till French Indo-China is reached on the Upper Mekong. From the Upper Mekong the frontier marches with Siam till it terminates at the sea at Victoria Point in the Malay Peninsula.

Various islands in the Indian Ocean are included in the Empire, and the Government of India has established certain protectorates on the Persian Gulf Coast and in the Southern Arabian peninsula.

The total area of India is 1,800,000 square miles ; of this total British India occupies 60 per cent.

For so large a territory the physical geography of India is relatively simple in that it may be divided into four chief areas :—

(1) The Himalayas.

To the north lies the highland plateau of the Pamirs, a central knot whence radiate mountain ranges in south-westerly, south-easterly and north-easterly directions, enclosing between their arms to the east the lowlands of Chinese Turkestan ; to the west the lowland of Turan stretching west and north round the north of the Caspian through Russia into Europe ; to the south the plain of Hindustan.

(2) The Indo-Gangetic Plain.

Between the arms of the Himalayas lies the Indo-Gangetic plain. This lowland consists of rich alluvial plains, watered by four great river systems which, with their tributaries and artificially canalized systems, form the richest and the most populous part of India. Of these four rivers, two (the Indus and Brahmaputra) rise near Lake Manasarowar, north of the Himalayas, and two (the Sutlej and the Ganges) rise south of the same range. In this way both northern and southern slopes of the vast Himalayan range, some 1,500 miles in length and 200 miles in width, form a never-failing supply of water and alluvial deposit for the plains.

The Indus flows at first in a north-westerly direction, turns south, and, breaking through the Himalayas, flows south to the Arabian Sea, a total length of 1,800 miles. The Sutlej, rising south of the mountains, flows west and south-west for 900 miles, finally uniting with the Indus.

The Brahmaputra flows eastwards for about 1,500 miles, turns south round the eastern end of the Himalayan range and thence west and south to join the Ganges, emptying itself into the Bay of Bengal.

The Ganges, rising in the Punjab on the southern Himalayan slopes, flows gently south till it is joined by the Brahmaputra some 75 miles from its mouth.

(3) The Deccan.

The peninsular plateau, of an average height of 2,000 feet above sea-level, is triangular in shape, bounded by the Malabar and Coromandel coast, meeting at Cape Comorin.

The Vindhya range, running due east from the Gulf of Cambay and the western and eastern Ghats, practically encloses the plateau.

The rivers run mainly from west to east into the Bay of Bengal, forming deltas of alluvial soil. The principal rivers running into the Bay of Bengal are Muhamuddi, Godavari, Kistna and Cauvery. These rivers run through defiles, impeding rather than assisting communication.

The Nerbudda and Tapti Rivers, however, run east to west, breaking their way through the plateau and emptying into the Arabian Sea.

The physical geography of the peninsula has largely shaped its history. The south-western coast, shut in by mountains, is still primitive; while the eastern coast, with easy access to the sea and to the interior, has made great progress.

(4) Burma.

Eastwards across the Bay of Bengal is the Province of Burma, consisting of the delta of the Irrawaddy, the central hills and the northern mountain system, which is separated from the Himalayas by the Brahmaputra. The mountain system of the Patkoi and Arakan, running north-east and south-east respectively, serves to divide the lowlands of the Brahmaputra from the lowlands of the Irrawaddy.

The geographical separation of Burma from the Indian peninsula has prevented racial invasion or intermixture, the Burmese being of Mongolian and not Aryan stock.*

Climate.

Though, as would be expected in a country so large as India (Cape Comorin at the extreme south lying in Lat. 10° N. and Kashmir in Lat. 37° N.), the ranges of climate are very great, yet the changes occur with extreme regularity.

If the Tropic of Cancer be taken as a rough dividing line between the plains and the plateau, then the foothills of the mountains lying north form Northern India and the plateau lying south forms Southern India. In Northern India there is a cool season, in Southern India there is so little variation that the "winters" are hot.

Within these rough limits many variations, due to local conditions, are found.

The dominating factor in the climate of India is the monsoons. The monsoon periods may be divided into two :—

(1) NORTH-EAST MONSOON—(a) *December to March*.—This is the cold weather monsoon period. An area of low pressure is present over the southern part of the Indian Ocean which is filled from an area of high pressure in the north of India. Only small amounts of rain are brought by this north-east wind.

(b) *March to May*.—During these months the reverse process to (a) above sets in, and there is a conflict between the two currents. This period constitutes the hot-weather season in India.

(2) THE SOUTH-WEST MONSOON—(a) *Rainy Season, June to October*.—The area north of the Himalayas has become a low-pressure area, and winds are dragged in from the Indian Ocean and the Arabian Sea. These are heavily charged with moisture, which they deposit along the Western Ghats and the Himalayas, and in Burma and Assam, and over the Ganges plain.

* It was agreed at the Indian Round Table Conference (1930) that the political separation of Burma from India should be immediately effected.

(b) *Cool Period, October to December.*—During this period the monsoon gradually retreats, giving place to the north-east wind, bringing dry, cool weather.

The seasons may be roughly summarised :—

- (1) Rainy season : June to October.
- (2) Cool season in Northern India : November to February.
- (3) Hot-weather season : March to May.

2. Historical Survey.

Within the limits of a brief sketch it will be impossible to indicate more than the outstanding events of Indian history, and of these only such will be selected as appear to throw light on the social and political developments which have taken place in India mainly during the last century and give to India its paramount political importance in the British Commonwealth to-day.

From the time of the invasion of Alexander (326 B.C.) until India passed after the Mutiny (1857) under the control of the British Parliament, the record of Indian history is confined almost entirely to those series of foreign invasions, the most lasting effects of which have been an intermixture of races and religions without parallel in any other country. Of these invasions the most important in their lasting effect were as follows :—

(a) **THE SCYTHIAN INVASION** (165 B.C.—A.D. 300).—This invasion swept away the traces of the Greek conquest and profoundly modified the religious beliefs and customs of the primitive and Aryan Hinduism.

(b) **THE MOGUL INVASION** (A.D. 1398—A.D. 1738).—The Muhammadan invasion of the Mongols under Tamerlane definitely established a new religion side by side with the native Hinduism. Though considerably less in number than the Hindus, the Moslems held sway actually until 1806.

After Aurangzebe (1658-1707), the Mogul Empire showed serious decline before the rising power of the native Mahratta chiefs from the Western Ghats and of the Sikhs, a religious sect of the Punjab. British connection with India began when the merchants of London trading to the East Indies received a charter from Elizabeth on December 31st, 1600. The British, extending their power, soon came into collision with the French. Arcot, Wandiwash, Plassey and Buxar established the position of Great Britain, represented by the Company, as the dominant European race in India. Appointed Governor-General under the Regulating Act of 1773, Warren Hastings, while greatly increasing the power of the Company, carried out many and vigorous financial and

administrative reforms, a policy followed by his successors, Lord Cornwallis (1786-1793) and Marquis Wellesley (1798-1805), who also initiated the system of alliances with certain of the native and independent states.

The first fifty years of the nineteenth century were marked by the gradual progress of the British up to the natural boundaries of the Indian sub-continent, and carried British rule into Burma. After the Mutiny (1857) the Company, as administering an Empire, came to an end, and the supreme authority of the Crown was established.

The next fifty years were mainly concerned with the building up of the material prosperity of India, the introduction of modern methods of communication and of education on the western model, with English as the medium of instruction. In general terms, India has as a result achieved partial national consciousness, which has led to the introduction of political reforms having as their object the increasing association of the Indian peoples in the task of government. The most outstanding of these measures is that connected with the names of Mr. Montagu (the then Secretary of State for India) and Lord Chelmsford (the then Governor-General). There was then introduced into the Provincial Governments a system of dyarchy or dualism, certain subjects being still reserved within the sole competence of the Governor and others transferred to the competence of Indian ministers, responsible to the elected legislatures. The whole system has recently been under inquiry by the Indian Statutory Commission, whose report, signed by Sir John Simon as president, was recently laid before Parliament. A Round Table Conference—at which, however, the Indian National Congress was not represented—met recently in London for a full discussion of such alterations in the provincial and central (all India) governmental systems and the relationship of the native states to both systems as may be found best suited to the rapid and revolutionary political changes that are taking place in India to-day. It appears that some form of Federal unity embracing British India and the native states will be adopted.

3. Political Divisions.

India is divided into three presidencies—Madras, Bombay and Bengal—and twelve provinces. Certain of these provinces lie outside the general governmental system which was introduced into India by the Montagu-Chelmsford reforms, and, by reason of their peculiar political position or geographical situation, are governed by commissioners.

The remaining provinces are :—

			<i>Area.</i> Sq. miles.	<i>Population.</i>
The Presidency of Madras	...	...	142,260	42,318,000
The Presidency of Bombay	...	...	123,621	19,348,000
The Presidency of Bengal	...	...	76,843	46,695,000
The United Provinces of Agra and Oudh	...	...	106,295	45,375,000
The Province of the Punjab	...	...	99,846	20,685,000
The Province of Bihar and Orissa	...	...	83,161	34,002,000
The Central Provinces	...	...	99,876	13,912,000
The Province of Assam	...	...	53,015	7,606,000
The Province of Burma	...	...	233,707	13,212,000
The Province of Coorg	...	...	1,582	163,000
The Province of Baluchistan	...	...	54,228	420,600
The Province of the North-West Frontier	...	...	13,419	2,221,000
The Province of Delhi	...	...	593	488,000

4. Constitution and Government.

Reference has already been made to this subject in the second chapter of this book, and no further recapitulation is therefore required.

It may, however, be noted that the London Round Table Conference will almost certainly introduce considerable changes in the present governmental system.*

5. Resources.

Population.

The population of British India only at the last census (1921) was 247,003,000. The population of the native states and agencies in political relation with the Indian Government in the same year was 71,939,000.

* Since the conclusion of the London Conference important conversations between the Governor-General (Lord Irwin) and Mr. Gandhi have taken place. Agreements have been entered into whereby the proposals of the London Conference have been accepted as the basis for further discussions in which the Indian National Congress will participate. Accordingly the Non-Co-operation campaign has been called off, political prisoners released, and the "boycott" of British goods for purely political reasons abandoned. The further conference is expected to be held in London. It seems likely that India will achieve Dominion status, under suitable safeguards for defence, financial obligations and protection of minorities.

Agricultural.

	(1) Total Production.	(2) Total Exports.	(3) Exports to U.K.	(4) Total Exports expressed as percentage of U.K. Consumption.
Wheat ... tons	8,507,000	300,000	251,000	4
Rice ... „	31,768,000	1,888,000	Negligible	—
Cotton ... bales	5,636,000	2,686,000	212,000	44
Jute ... „	9,906,000	5,000,000	4,900,000	98
Tea ... lb.	403,653,000	360,000,000	288,000,000	80

By far the greater part—seven-tenths—of the population of India is engaged in agriculture. The principal agricultural areas are three in number :—

(1) **THE MOUNTAIN BORDERLANDS.**—Economically, this district is the least important. Tea is grown in the Darjeeling district ; rice is grown in well-watered valleys ; wheat and maize are grown on the slopes of the hills.

In the greater part of the North-West Frontier Province and Baluchistan, where a lighter rainfall prevails, the population, not exceeding 50 per square mile, is mainly engaged in pastoral occupations.

(2) **THE NORTHERN PLAINS.**—(a) The irrigated plains of the south-west Punjab, Sind, Rajputana and lowland portions of Baluchistan and the North-West Frontier Province.

Over 8,000,000 acres are irrigated from the Indus and its tributaries. Millet, wheat and maize are the chief crops. In the Punjab cotton is grown.

(b) *The Ganges Plain.*—This area of rich, deep alluvial soil supports 40 per cent. of the Indian population.

Rice and jute are produced in Bengal ; wheat, millet, barley and cotton are grown in the United Provinces and South-Eastern Punjab ; the greater part of the Indian rice crop is grown in Assam and Northern Bengal ; 60 per cent. of the tea is grown in Assam.

Calcutta is the natural outlet for the region.

(3) **THE DECCAN PLATEAU.**—The north-western portion of the Deccan plateau is largely composed of a black disintegrated

basaltic rock, known as Black Cotton soil. The area extends eastwards to the Central provinces and southwards to the State of Hyderabad. The cotton, however, is generally poor in quality and short in staple. It is woven into rough cotton piece goods for Indian use or exported to Japan or Germany.*

Rice, sugar, millet and barley are grown in the rest of the Deccan plateau, the soil being generally poor in quality.

Minerals.

The mineral resources of India have not been fully surveyed. Output generally shows an increase, though India does not as yet occupy a predominant place as a supplier of minerals, with the exception of manganese, the total production of which is treble the entire needs of the United Kingdom.

The chief minerals produced in India are as follows :—

COAL.—About 22,000,000 tons of coal are mined annually, principally in Western Bengal and Bihar and Orissa. About one-tenth of this amount is exported, and about 400,000 tons are annually imported, mainly from Great Britain, South Africa and Australia, for the bunkering trade and for industrial use.

OIL.—The total Indian production is slightly in excess of 300,000,000 gallons annually. Burma is the principal producer. Other sources of supply are in the Punjab and Assam.

MANGANESE.—The total production of manganese is about 900,000 tons, of which 700,000 tons is available for export. Exports to the United Kingdom totalled 155,000 tons annually. The principal producing areas lie within the Central Provinces and in the Madras Presidency.

IRON ORE.—Considerable deposits of iron ore of good quality are worked in Orissa, Central Provinces and Western Bengal. Nearly 1,000,000 tons of pig iron are produced annually. Of recent years, following the lead of the Tata Company, a number of concerns producing iron and steel have grown up. Despite these developments, India remains a large importer of manufactured iron and steel goods, etc.

Other minerals produced and entering into the export trade of the Indian Empire are lead, silver, mica, tungsten, chromite, etc., the total value of all minerals exported being Rs8,00,00,000 annually.

Industrial Resources.

Though the principal Indian imports consist of manufactured goods, there has been a marked increase in large-scale industrial

undertakings. Manufactured goods of all kinds represent approximately 28 per cent. of the total Indian export trade. The greatest advance in industrial technique has been in the textile industries—cotton, silk and jute—and in the iron and steel industries, particularly the Tata works at Jamshedpur. This industry, however, received a generous measure of protection against foreign imports. During the war, munitions of war, steel rails, etc., were produced for the Mesopotamian campaign.

6. Communications.

Rail.

Nearly all the railways in India are State owned and administered, or leased by the State to operating companies.

The railways in India are designed not only to increase the military strength of India, but to assist the commerce of the country by bringing surplus crops to the main centres of distribution and to the seaports. Karachi, Bombay, Madras and Calcutta are all brought into connection with each other by means of the backbone of the entire system, a grand trunk line traversing the northern plains from Calcutta to Peshawar. There is no connection between the railway systems of India and Burma.

There are approximately 40,000 miles of railway track in India, and there are two main gauges in use :—

- (a) The broad gauge, 5 ft. 6 in., including all the main lines and in all half the railways of India.
- (b) The metre gauge for about 16,000 miles of track, mainly branch lines. It is the universal gauge in use in Burma.
- (c) The narrow gauge, 2 ft. 6 in., or 2 ft.

While the advantages of the broad gauge are considerable, especially for travel in tropical countries, the difficulties of finding additional rolling-stock in case of emergency would be considerable.

Lines running from the principal ports are as follows :—

(i) FROM CALCUTTA.

- (a) The East India Railway Company—E.I.R.
Calcutta—Allahabad—Delhi—Ambala.
- (b) The Bengal Nagpur Railway Company—B.N.R.
Calcutta—Nagpur.
Calcutta—Vizagapatam.

(ii) FROM BOMBAY.

(a) The Great Indian Peninsular Railway Company—
G.I.P.

Bombay—Jubbulpur.

Bombay—Nagpur.

Bombay—Raichur.

(b) The Bombay, Baroda and Central India Railway—
B.B. & C.I.R.

Bombay—Delhi.

(iii) FROM MADRAS.

The Madras and Southern Mahratta Railway.

Madras—Raichur.

Madras—Vizagapatam.

Madras—Calicut.

(iv) FROM KARACHI.

The North-Western Railway—N.W.R.

Karachi—Hyderabad—Jodhpur—Delhi.

Karachi—Hyderabad—Lahore—Rawalpindi—
Peshawar.**Rivers.**

Despite the great rivers, the country is ill-provided with navigable waterways. The use of the rivers for transportation has declined as the railways have come into use.

The Indus is navigable for steamers of light draught.

In the delta of the Ganges and on the Brahmaputra considerable steamer transport passes between Calcutta and Cawnpore.

The Irrawaddy and its tributaries are important waterways, the main system being navigable 900 miles inland.

Ports.

Bombay, Calcutta, Karachi, Colombo, Rangoon and Chittagong are the principal seaports.

Calcutta, the natural outlet of the Ganges plains, standing 120 miles up the Hoogli River, is, despite its greater distance from England, the largest and most important trading centre.

Bombay is the second port of India. It has the advantage of position on the west coast of the peninsula, and is open to ocean-going vessels in all seasons and weathers.

Karachi is the most modern port in India and is continually undergoing enlargement. Its position gives it a strong strategic position in relation to the North-West Frontier; it is less affected than other western ports by the south-west monsoons, and its climate is more equable. It will become in the future the air port of India, being the natural air inlet to the Indo-Gangetic plains.

Madras is not by nature a good port, but has been converted from an open roadstead into a harbour of comparative safety. It is the chief port of the east coast south of Calcutta.

Chittagong, standing in an estuary navigable for ocean-going steamers, is becoming an important outlet for the produce of Assam and Northern Bengal.

Rangoon is the capital of Burma, and is the natural outlet for the products of the entire province. The harbour stands some twenty miles up the River Rangoon, which is an estuary navigable by ocean-going steamers. The channel requires constant attention. Rice, teak and petroleum are the chief exports.

Colombo, the capital of Ceylon, on the west coast of the island, is one of the finest artificial harbours in the world and one of the great ports of call of the East.

Roads.

The total mileage of surfaced roads in India is slightly under 60,000.

"The metalled or military roads have on the whole a level surface, but are so scorched and cracked by heat in parts that the surface disintegrates into fine dust some inches deep, unpleasant in dry weather, and creating a sticky amalgam in the rains. Except in the neighbourhood of cantonments, repairs are only carried out infrequently; bridge works are often old and sometimes dangerous; gradients, particularly in the Deccan, leave much to be desired, and curves are hair-raising. The roads joining the large military stations are, however, on the whole in good repair considering the climate and the labour available, and are a necessary and useful adjunct to rail communications. The advent of the motor is having a beneficial effect on the building and maintenance of roads."*

7. The Defence Forces of India.

The Army in India.

As a result of the war considerable changes in the organization in the commands and administration of the Army in India were carried out. These changes, while securing greater economy in expenditure, were designed to bring the Army in India in respect of equipment and transportation, general administration and command into line with modern requirements. In general terms these changes served to complete the reorganization of the Indian Army first set in motion by Lord Kitchener following the South African War.

* "Imperial Military Geography," Capt. D. H. Cole, M.B.E. By permission of Messrs. Sefton Praed.

COMMAND AND ADMINISTRATION.—In regard to purely military affairs, the supreme responsibility for the defence of India, as of the units to whom this defence is entrusted in India itself, rests through the Secretary of State for India upon the British Parliament. The steps in the organization of this control may be conveniently set out as follows :—

(a) *Secretary of State's Advisory Council.*—This Council, which is advisory, contains two military members—the Military Secretary to the Department, an officer of the Indian Army, and one retired Indian Army officer of high rank (*vide* Chap. II).

(b) *The Governor-General's Executive Council.*—Subject to the Secretary of State's direction, the supreme executive authority in all military matters rests with the Governor-General in Council. The Commander-in-Chief in India is a member of this Council, and as such he is the military adviser to the Government of India and solely responsible for all operations carried out in India.

(c) *Army Headquarters.*—The Commander-in-Chief, assisted by the Chief of the General Staff, Adjutant-General and Quartermaster-General and other staff officers, is responsible for the administration of the Army. This is a general staff on modern lines.

(d) *Army Department.*—This is one of the departments of the Indian Government for which the Commander-in-Chief is responsible. The General Staff and other staff officers are responsible, in addition to their ordinary staff duties, for carrying out new proposals, etc., which, involving expenditure or questions of policy, must come up for decision by the Government of India or the Secretary of State. Such proposals are first submitted to the Army Department. At the head of the Department is the Secretary, a civilian, who represents the Department in the Legislative Assembly.

The Army Department may be said to approximate to the Department of the Permanent Under-Secretary of State for War and the Financial Secretary at the War Office.

In India the Indian Naval Service and the Royal Air Force are administered by the Commander-in-Chief.

The Regular British and Indian armies number 68,000 and 164,000 respectively. British troops are organized in brigades and divisions with the Indian Army, the normal proportions being one British battalion to three Indian. The composition of the Army in India is as follows :—

	<i>British.</i>	<i>Indian.</i>
Cavalry	5	21
R.H.A. Batteries	4	—
R.F.A. Batteries	44	—
Medium Batteries	9	—
Pack Batteries	6	19½
Infantry Battalions	45	147*
Pioneer Battalions	—	13†
Armoured Car Companies	6	—

* 20 Training Battalions.

† 3 Training Battalions.

At present the Army is organised and distributed in peace time solely with a view to its use in war. The country is divided up into military districts, within which are quartered—

- (i) The covering troops, which guard the frontier and enable mobilization and concentration to proceed.
- (ii) The field army for operations beyond the frontier.
- (iii) The garrison, for internal security and the guarding of lines of communication within India itself, allowing complete freedom to the field army.

There are four commands :—

(a) *Northern Command*.—North-West Frontier Province, Waziristan District and the Punjab (excluding Delhi). Headquarters, Rawalpindi. The Command is sub-divided into five districts.

(b) *Western Command*.—Baluchistan and Sind. Headquarters, Quetta.

(c) *Eastern Command*.—Delhi, the United Provinces, Bengal, Bihar and Orissa and Assam. Headquarters, Naina Tal. The Command is sub-divided into three districts.

(d) *Southern Command*.—Central India and Central Provinces, Bombay and Madras Presidencies. Headquarters, Poona. The Command is sub-divided into four districts.

(e) The Burma Independent District. Headquarters, Maymyo.

The Royal Air Force in India.

The Royal Air Force in India is auxiliary to the Army and is under the control of the General Officer Commanding-in-Chief.

The headquarters of the Royal Air Force is at New Delhi. By arrangements similar to those of the Army, the command is sub-divided.

No. 1 (Indian) Group Headquarters (Peshawar), contains Nos. 1 and 2 Indian Wing Headquarters at Kohat and Risalpur respectively. No. 3 Indian Wing Headquarters, Quetta.

Units administered by command headquarters are :—Aircraft Depot at Karachi, Aircraft Park at Lahore and one Army Co-operation Squadron at Ambala.

The Aircraft Depot at Karachi is suitably placed for the rapid handling of stores, etc., in transit by sea, and, being healthier, is a more suitable spot for European tradesmen to work in. It will also be in the future, even more than at present, the air entry into India. An airship mooring mast and hangar have been erected at Karachi.

Lahore is a distributing centre for squadrons other than those at Quetta.

8. The Defence of India.

If the Empire of India be regarded only from the point of view of its trading importance to Great Britain, its defence would be an object of the greatest concern ; but when it is further remembered that India is the keystone of the arch in the defence of the Indian Ocean and a safeguard of all British interests in the Far East, its position as a great defensive base and a generally stabilizing influence in the present political ferment of the Far East makes its protection a paramount question in any scheme for the defence of the Commonwealth.

The problem of the defence of India is a dual one necessitated by the geography of the country. India being in shape roughly a triangle with its apex projecting into the sea and its two sides washed by the oceans, the problem of its defence against attack by all the great Powers save one is a naval question.

The main burden of the naval defence of India rests upon the British Fleet, but India has begun the development of an Indian Naval Service.

From the purely military point of view the defence problem separates itself into two distinct yet interdependent parts :—

(a) Internal security.

(b) Security against external aggression.

Of the first of these problems, the Statutory Commission reports in the following terms :—

“The Army in India is not only provided and organized to insure against external dangers of a wholly exceptional character ; it is also distributed and habitually used throughout India for the purpose of maintaining or restoring internal peace. In all countries the soldier when in barracks may be regarded as available in the last resort to deal with domestic disturbances with which the policeman cannot cope, but in Britain and elsewhere in the Empire this is little more than a theoretical consideration. The military is not normally employed in this way, and certainly is not organized for this purpose. But the case of India is entirely different. Troops are employed many times a year to prevent internal disorder and, if necessary, to quell it. Police forces, admirably organized as they are, cannot be expected in all cases to cope with the sudden and violent outburst of a mob driven frantic by religious frenzy. It is, therefore, well understood in India both by the police and by the military—and, what is even more to the point, by the public at large—that the soldiers may have to be sent for.” (C.M.D. 3568).

Civil disturbance most frequently arises from outbreaks of a communal rivalry which has its origin in the wide diversities of race, religion and language to be found in the Indian continent. These for greater clearness are briefly set out.

The population of India may be divided into three main divisions :—

(a) THE INDO-ARYAN TYPE.—This type is met with chiefly in the Punjab, Rajputana and Kashmir. Roughly, people of this race occupy the valleys of the Indus and Ganges, having as conquerors displaced the earlier dwellers, who form the second main division.

(b) THE DRAVIDIAN TYPE.—Peoples of this type are found in the Deccan plateau and in the south of the peninsula, to which direction they have been driven by the Aryan invaders. They form the labouring class of the community. "Labour is the birthright of the pure Dravidian, and as a coolie he is in great demand wherever one meets him."*

(c) THE MONGOLIAN TYPE.—This type is represented by the peoples inhabiting the borderland between India and Tibet and by the Burmese. The general characteristics of appearance are those of the Chinese.

The three principal religious divisions of the people are :—

Hindus	...	...	68 per cent. of the total population.
Muhammadans	...	...	21 per cent. of the total population.
Buddhists	...	...	4 per cent. of the total, mainly Burmese.

The operation of the caste system has broken India up into large numbers of exclusive aggregates, the members of which are forbidden to marry outside the group to which they themselves belong. The caste idea is also associated with occupation.

The languages are as diverse as the castes, religions and races. There are stated to be over two hundred vernacular dialects, but the principal languages are Western Hindi, Bengali, Telegu and Tamil. Hindustani, a literary product of Hindi, is the *lingua franca* of India. English is understood and spoken by many.

Security against External Aggression.

As regards defence against external aggression from the land side, India has to carry a "burden of anxiety and provide against actual dangers on her north-west frontier which are wholly without parallel" in any of the self-governing Dominions.

"India throughout history has had to endure a series of incursions by foreign invaders, who have forced their way through the defiles in the north-west, and at other points where a gap was found in the immense mountain barrier which cuts off India from the rest of Asia. It is noteworthy that, notwithstanding the teeming millions of India's population, comparatively small

* "The People of India," Sir. H. Ridley.

bodies of invaders have often succeeded in overcoming all opposition and making their way through to the plains, where they have established themselves as conquerors. It is the difficult and necessary role of the Army in India to guard against a repetition of these dangers. In peace time the duty of the covering troops, assisted by frontier levies of various kinds, is to prevent the independent tribes on the Indian side of the Afghan frontier from raiding the peaceful inhabitants of the plains below. From 1850 to 1922 there have been 72 expeditions against these tribes—an average of one a year. Behind and beyond this belt of unorganized territory lies the direction from which, throughout the ages, the danger to India's integrity has come—a quarter, we may observe, occupied by States who are not members of the League of Nations.”*

This burden of anxiety is occasioned, in the first place, by the presence along the North-West Frontier Province of a number of tribes who, altogether apart from their marauding tendencies, are liable to be swept into frontier raids of a general character; in the second, by the State of Afghanistan, between which and the tribes aforementioned no real boundary of demarcation exists; and, thirdly, the presence beyond Afghanistan of the great Power of Asia, the U.S.S.R.

As a background to the whole question of the defence of the North-West Frontier of India, the following brief notices of the three factors mentioned above are necessary :—

(a) **RUSSIA.**—Following the Mutiny a forward movement carried the area of British control over Baluchistan up to the Persian and Afghan borders. The need for such an advance was largely dictated by the Russian forward movement, which led in 1878 to the reception of a Russian envoy at Kabul, and between 1878 and 1885 Afghanistan was twice invaded with a view to the maintenance of the authority of the Government of India. In the latter year a commission was appointed to delimit the boundaries between Russia and Afghanistan.

Russian railway construction was eased off on the conclusion of the Anglo-Russian agreement in 1907. Between 1909 and 1911 railway construction was re-commenced, two lines being pushed down to the northern Afghan border at Kushk and Tarmez respectively, linking up with the Central Asian Railway from Krasnovodsk on the Caspian and with the Tashkent—Orenburg railway leading to Moscow.

The extensive intrusion of Russian propaganda into India and the treaties entered into between Afghanistan and the U.S.S.R., the extension of Russian influence in Khiva and Bokhara, give

* Report of the Indian Statutory Commission, Vol. I., C.M.D. 3568.

no reason to suppose that Russian aims in this area have been abandoned.

(b) **AFGHANISTAN.**—Afghanistan occupies the position of a buffer state between British India and Russia, and these two Powers, by reason of their geographical contiguity, have determined the international relations of the country. Though the forward policy of Russia had led Afghanistan to accept British control over its foreign policy, such control, to avoid offence to Afghan susceptibilities, was deliberately unobtrusive. During the General War and till his death in 1919, the Amir Habibullah remained loyal to his undertakings: but the Russian revolution of 1917, removing pressure against Afghanistan, led the new ruler, Amanullah, to think that the time was ripe to secure "those full rights of government" that are possessed by other independent powers of the world.

In April, 1919, Afghan forces began a deliberate invasion of British India. On July 25th an armistice was requested by the Amir and peace was signed in August.

Though soundly beaten in this short campaign, in which aeroplanes played a decisive part, the Amir gained the principal point for which he had started the war, the abandonment by the Indian Government of its control over Afghan foreign relations. This freedom was quickly used to enter into treaty relations with Soviet Russia and Turkey.

The new Amir, following the example of Mustafa Kemal in Turkey, set in motion a number of reforms designed to strengthen the independence of his country. These reforms, embodying the adoption of western methods of dress, education and technique generally, soon aroused the dislike of the Afghans in general and of their religious leaders in particular.

After a confused period of civil war, the Amir Amanullah was forced to take refuge in Italy.

The British and foreign diplomatic staffs and other foreign residents were evacuated by aeroplane to the number of about 600 persons.

(c) **THE FRONTIER TRIBES.**—While it is clear that the land defence of British India against another great Power is determined by the geographical situation of Afghanistan, the relations between British India and the latter country are rendered difficult by the existence of a "no man's" area between them.

This tract of tribal territory comprises an area of 25,000 square miles and contains a population of 3,000,000. Predominantly Moslem in religion, the tribesmen are under the authority of their local Khans, and, split up as they are into various territories—Wazirs, Mahsuds, Bannuchis, Shinwaris, etc.—are constantly at feud among themselves.

In particular, Waziristan, with its lawless population, has for nearly eighty years constituted a fruitful source of trouble. While the Government of India would always have been prepared to leave the tribes in this area alone, it was unable to do so so long as the Amir of Afghanistan claimed to exercise any form of legal sovereignty therein.

In order, therefore, to incline the political balance in favour of the Indian Government, a system of subsidies to the various tribes was inaugurated which provided the Indian Government not only with a political lever against Afghanistan, but served to secure the Gumal and later the Tochi passes against tribal raids. In 1893 an agreement was reached between the Governments of Afghanistan and India whereby a line subsequently known as the Durand Line became the boundary between the two countries. Subsequent experience over a considerable number of years was to show that, partly owing to the inherent lawlessness of the tribes and partly to the interest continuously displayed by Afghanistan towards Waziristan, the system of tribal subsidy was not sufficient to maintain peaceful methods of life along the borders.

Various policies have been attempted and abandoned. The "close border" policy of establishing a strong cordon along the junctions of the foothills and the plains, the "forward policy" of a firm occupation as far as the Durand Line, were necessarily compromises stopping short of the military invasion and occupation of the whole of Waziristan.

Incitement from Afghanistan, the religious disturbances caused by the Caliphate question, and the withdrawal in 1919 of British forces from Waziristan, led to outbreaks of raiding in the districts of Peshawar, Kohat, Dera Ismail Khan, during the course of which, in 1919 and 1920 alone, 300 British subjects were killed and extensive damage to property done.

An ultimatum in 1919, in which were certain conditions relative to road building, the surrender of arms and guarantees for future good behaviour, was accepted by some but refused by others, in particular the Mahsuds. Against these, military operations in which aircraft again played an important part, were undertaken and the Mahsud country was occupied.

The permanent occupation of the country by regular forces was largely abandoned on the score of expense. In order, however, to retain an effective measure of control, roads capable of carrying mechanical transport have been constructed. Such roads, as for instance that from Jandola up the Tank Zam valley, via Razmak into the Tochi valley, which it is not easy to destroy, not only allow the Indian Government to march troops at will through the country, but should enable the economic development of the country to proceed. The steady development of this

policy should within reasonable time allow of the infiltration of more civilized ideas.

Even should such pacificatory means be in course of time entirely successful, they will only serve to make the military problem less difficult to handle; they will not remove it. The Statutory Commission concludes its survey of the defence question by stating: "We are only concerned to emphasise the importance of India's problem of external defence. The outstanding fact is that the urgency and extent of the problems of the military defence in India are without parallel elsewhere in the Empire." (C.M.D. 3568.)

From the exclusively military and air point of view, apart from the political, the defence of India is concerned with the area known collectively as the North-West Frontier. Politically the whole area should be divided into the North-West Frontier Province, composed of the four districts—Peshawar, Kohat, Bannu and Dera Ismail Khan, lying west of the Indus, and Hazara lying east. Beyond and roughly north-west of them lie the tribal territories, North and South Waziristan, the Kurram, the Khyber and the Malakand.

An accurate knowledge of the problems of the defence of this frontier requires a close study of the geography of this difficult region.

(a) THE GEOGRAPHY OF THE NORTH-WEST FRONTIER.—At a point near Gilgit where the main Himalayan range leaves Indian territory, a great branch, the Hindu Kush, is thrown off across Afghanistan in a rough south-westerly direction and terminates near Herat. A spur from this range, the Sulaiman mountains, runs south-south-west to the sea and continues along the borders of the Arabian Sea and the Persian Gulf.

The border line between Afghanistan and India runs roughly down this spur in a south-south-westerly direction, bending sharply west to encircle Baluchistan; from Robat the line bends south-east and terminates in the Arabian Sea, west of Karachi.

The dominating features of the whole area are the Sulaiman range running from the Hindu Kush, and the river Indus which, breaking its way through the Himalayan range to the north-west near Gilgit, runs along the foot of the mountains and gains the sea south of Karachi; the various tributaries of the Indus rising in the Hindu Kush break their way through the range, joining the main stream of the Indus.

As it is these river valleys that in the main form the most accessible approaches from Afghanistan to India, it will lead to simplification to study them in detail.

(i) *The Kabul River*.—Rising in the Hindu Kush, the Kabul drains the most fertile areas of Afghanistan.

On the Kabul River lie Kabul, Jalalabad and Dakka. At this latter place the river turns north-east, and the road passes on through Landi Kotal and through the Khyber Pass. A railway runs from Peshawar as far as Jamrud, the Indian entrance, and is continued to the Afghan border at Landi Khana. This line links up with the rest of the Indian system at Attock.

(ii) *The Kurram*.—This route leaves Afghan territory at Peiwar Kotal, proceeding down the Kurram valley to Thal. The narrow-gauge line from Thal to Kohat is linked with the main system at Jand, crossing the Indus at Khushalgarh. During winter the route is blocked by snow.

(iii) *The Tochi*.—The Tochi river and valley, leading through the Waziri territory, traverse difficult country and are consequently less used than the other routes. The pass opens the route to Ghazni, an important city of Afghanistan. The valley is connected with the railway system via Kalabagh, on the Indus, and Bannu, which commands the entrance to the valley. Other points along the pass are Idak and Miramshah. The route is likely to develop in importance as a result of the Waziri operations in 1922.

(iv) *The Gomal*.—The Gomal river valley constitutes one of the most frequented entrances from the Punjab into Afghanistan. The route passes through Mahsud country.

The road runs from Dera Ismail Khan on the Indus to Tank, and proceeds via Jandola and Razmak in the general direction of Ghazni. A narrow-gauge railway connects Dera Ismail Khan with Tank, the Indus being crossed by a bridge of boats or during flood weather by a steam ferry.

The Gomal receives near Kajuri the waters of an important tributary, the Zhob, on which stands Fort Sandeman, a military outpost commanding a camel route leading to Kandahar.

(v) *The Bolan*.—Though not strictly in the region of the North-West Frontier, the Bolan Pass in Baluchistan occupies, next to the Khyber, a position of great strategical and commercial importance, as it gives entrance to the province of Kandahar, the most important in Afghanistan, as part of the province is fertile and well watered and offers considerable facilities to an invading army.

The Bolan is a narrow gorge, approximately fifty miles in length, connecting Sibi to Quetta, the headquarters of the military district of Baluchistan.

The railway crosses the Indus at Sukkur and proceeds via Jacobabad, Sibi, Spezand to Quetta; an alternative route from Sibi via Harnai and Bostan links up with the extension of the former line from Quetta to New Chaman, situated about seventy miles from Kandahar, the present railhead. An important branch line covering the whole southern Afghan border runs from Spezand via Nushki—Dalbandin to Duzdapa.

(b) THE GEOGRAPHY OF AFGHANISTAN.—Afghanistan may be roughly considered as a quadrilateral, 250,000 square miles in area. This quadrilateral is divided into two sections—northern and southern—by the Hindu Kush, which runs roughly east and west from the Pamirs to Herat. The main geographical features of Afghanistan are thus described :—"If we imagine the letter 'V' so suspended that its sharp end is up in the north-east and its legs pointing west and south-west, we shall get into our minds the principal trend of the system. The upper leg of the '>' would be thus lying horizontal, and would represent the range of the Hindu Kush, or Paropamisus, with its extremity at Herat, while the lower leg would represent the mountains of the Kunar river, the Safed Koh, and the Sulaiman range, with the extremity at Sibi, at the Indian end of the Bolan pass. Near the top of the '>' midway between the legs, would be Kabul. Parallel to and outside the lower leg runs the mighty Indus, the river of Sind, while between the Indus and the leg of the '>' there lies the country of Ruh, the ancient name for the hills of the Pathan tribes, whence came the Rohillas, and which is now for the most part the British tribal tracts on the North-West Frontier. North of the upper leg, between it and the River Oxus, lies the province of Afghan Turkistan, of which Balkh is the principal town. Between the legs run parallel ranges of hills, while close to Kabul itself rises the Helmand river, which flows south-west into the Registan deserts and flats, between Kandahar and the Persian border, much of which, in the days before Chingiz Khan and his Tatars lived to make the world a desert, was a thickly populated area."*

A Russian railway from Bokhara runs along the Oxus river to Tarmez, and another from Merv to Kushk post, seventy miles north of Herat.

From Tarmez practicable roads run to Kunduz and the Khawak pass or the Ak Robat pass to Kabul, or from Kushk post via the Ardewan pass to Herat; thence the road proceeds via Sabzawar and Farah and, crossing the Helmand river at Givishk, to Kandahar. The road from Kandahar to Kabul, 325 miles, is the best in the country. It should be noted that the distances from Kushk post to Herat and Chaman to Kandahar are approximately the same; and also that the distances from the Khyber to the Khawak pass and the Ak Robat pass are 295 and 315 miles respectively, and that the distances to the same passes from Tarmez are 260 and 220 miles. Nor should the fact be overlooked that the introduction of the motor has provided a new means of concentration in a country like Afghanistan, which is lacking in railways, but can afford to build and maintain metalled roads.

* "Afghanistan—from Darius to Amanullah," by Lieut.-General Sir George MacMunn. By permission of Messrs. Bell.

The principal railheads on the Indian frontiers are situated in the neighbourhood of Peshawar and at Chaman—north and south respectively—and at Kohat. It should be noted that the accommodation thus provided is not extensive, as the lines are single tracks and the gradients are sufficiently steep to cause loads to be much reduced.

Various strategical conceptions for the defence of India against external aggression have been propounded. These policies, "forward," "half-forward" and "close border" (back to the Indus), must necessarily be conditioned by many factors—*i.e.*, the attitude of Afghanistan and of the tribal territories, or by changes in the system of transportation, or by the development of areas which, formerly deserts and so incapable of supporting an invading army, have now by irrigation become fertile, as for instance areas in the Southern Punjab.

The solution of the question of defence was, however, invariably bound up with the question of communication by road and rail. To-day aircraft have introduced a new factor. The successful evacuation of the foreign residents at Kabul, though admittedly assisted by the Afghan authorities, indicated that even the most "forward" policy may be so no longer, since Kabul is within range of modern aircraft which may also largely overcome the difficulties of inter-communication along the whole length of the border.

The position of the Royal Air Force stations on the North-West Frontier are as follows :—

NO. 1 INDIAN GROUP.

No. 1 Wing Headquarters	...	...	...	Kohat.
27 Bomber Squadron	...	...	...	Kohat.
60 Bomber Squadron	...	...	...	Kohat.
No. 2 Wing Headquarters	...	...	...	Risalpur.
11 Bomber Squadron	...	...	...	Risalpur.
39 Bomber Squadron	...	...	...	Risalpur.
20 (A.C.) Squadron	...	...	...	Peshawar.
28 (A.C.) Squadron	...	...	...	Ambala.
No. 3 Wing Headquarters	...	...	...	Quetta.
5 (A.C.) Squadron	...	...	...	Quetta.
31 (A.C.) Squadron	...	...	...	Quetta.

If it became necessary to undertake major operations for the defence of India, three lines of defence appear possible :—

- (1) The line of the Indus ;
- (2) A line from Chitral to Karachi ;
- (3) The line Ghazni—Kandahar—Kabul.

Whichever line be held, the decision would turn upon the relations existing between Afghanistan and the Government of India, and the principal object would be the defence of Delhi,

which has been the objective of every invasion from the north-west. The strategic importance of Delhi is best interpreted from the map. It will be seen that any places in the plains either of the Indus or Ganges may easily be reached from Delhi, and invaders are forced by the pressure of the desert and the Himalayas to pass close to the city.

To-day Delhi is an important railway junction as well as the seat of the Government of India.

In any of these operations the primary consideration is the question of communications, and it is worth noting that if the new ruler of Afghanistan pursues the same—if slightly modified—policy as the ex-Amir Amanullah and takes active steps to modernize his country both in respect of the arming and equipment of the army and the provision of motor traction and suitable metalled roads, the time factor which before clearly weighed in favour of India may now incline in the opposite direction.

It may be that the rapidity of action of aircraft will be of the greatest importance either in any future frontier warfare or in the event of major operations. The value of the co-operation of aircraft in frontier warfare is summarized in the official history of the Waziristan Campaign, in which the author sums up the difficulties that militate against the use of aircraft in border fighting and also the successes gained in the Waziristan Campaign despite the generally inadequate technical equipment supplied. The services rendered by aircraft particularly in the supply of maps over which operations were contemplated, close co-operation with the infantry and the pinning of the enemy to his position were of marked value. The writer also considers that the use of aircraft for the rapid conveyance of supplies,* stores and ammunition from the base to troops at the front may altogether change the problem of frontier warfare, and in conclusion says :—
“But even as things are, it may be asserted that the Waziristan Campaign of 1919-20 has conclusively demonstrated the value of aircraft on the frontier. To develop possible uses of such an auxiliary arm, there must be a thorough comprehension on the part of both troops and airmen as to what aeroplanes can do in mountainous country, and, secondly, it is very necessary to develop the methods of communication between aircraft and the ground. The progress that was made in this respect between the operations of 1919-20 and those of 1923 round Razmak offers a convincing proof of these statements.”†

* A notice in the press states that a large body of troops have recently for a period of three days been provisioned with supplies carried by aeroplanes and dropped in parachutes at previously arranged places. The experiment is said to have been entirely successful.

† “Waziristan,” De Watteville. By permission of Messrs. Constable.

CONTRIBUTIONS OF THE INDIAN EMPIRE TOWARDS IMPERIAL DEFENCE.

(a)	Cavalry Regiments	...	...	...	...	21
	Artillery (Pack Batteries)	...	...	...	...	19½
	Infantry Battalions	...	...	...	...	127
	Pioneer Battalions	...	...	...	...	10

Total strength in 1929 : 172,175.

The Auxiliary Force numbers 31,600, and is confined to persons of British extraction ; the Indian Territorial Force, 20,000.

The Indian States forces, raised and maintained by the Indian States and trained under the supervision of British officers in an advisory capacity, number 44,000.

(b) APPROPRIATIONS FOR DEFENCE.—Rs58,58,71,000 (£43½ million).

(c) CONTRIBUTIONS DURING THE GENERAL WAR.—During the General War, 1914-1918, in addition to the Regular Army, 1,097,000 persons were recruited for either combatant or non-combatant service, and in addition nearly 60,000 from the State of Nepal.

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CHAPTER XIV

THE MIDDLE-EASTERN AREA

EGYPT—THE MANDATED AREAS OF PALESTINE, TRANS-JORDAN AND 'IRAQ—
THE PRINCIPALITIES OF THE ARABIAN PENINSULA.

THE Turkish Empire, holding under its suzerainty territories in Europe, Asia and Africa, and therefore a geographical link between these continents, and composed as well of many and widely divergent races, religions and nationalities, would, by reason of these differences, have most probably disintegrated during the nineteenth century had it not been for two powerful factors which succeeded in preserving for it a slowly diminishing place among the Powers. Firstly, the Great Powers could never be found to agree as to the precise terms upon which a partition of the Turkish possessions should be carried out. Secondly, the leadership of the Moslem fraternity, combined with the undoubted strategic importance of Constantinople and of the empire as a whole in the Middle-Eastern area, was such as to make it desirable to preserve her independence as a potential ally of extreme value to either of the two groups into which the European Powers had become divided prior to the General War.

That the defeat of the Central Powers would bring about the disintegration of Turkey was clearly recognized by the general agreements for the division of the Turkish Empire made by Russia, Great Britain and France in the Treaty of London (April, 1915). In 1916 further and more definite agreements had been concluded between Great Britain and France in the Sykes-Picot Agreement, and about the same time the Sherif of Mecca had been approached by Great Britain with an offer of independence from Turkish rule as a reward for active revolt against his suzerain.

Though the Sykes-Picot Agreement was ultimately disavowed, mainly in deference to the wishes of the United States of America, its main intentions were executed when the possessions of Turkey were taken from her by the Treaty of Sevres (1920).

Egypt, then a British Protectorate, was declared independent of a suzerainty that had for years been merely nominal; the Arabs of the peninsula were declared independent; Syria was allotted as a mandate to France; while Palestine, Trans-Jordan and 'Iraq were similarly allotted to Great Britain. To all intents and purposes the "sick man" of Europe was at last dead and his possessions had been divided, there remaining only the Anatolian highlands and the city of Constantinople. By 1923,

however, the Treaty of Lausanne confirmed Turkey in the possession of Constantinople and its hinterland practically as it existed in 1914, and the Greeks had been evicted from Smyrna. The mandated areas remain as allotted, save for a dispute concerning the northern boundary of 'Iraq which, it was agreed, should be amicably settled by arbitration between Great Britain and Turkey.

One further political decision of the first importance had in respect of this area been made during the War. In November, 1917, a note over the signature of Mr. (Lord) Balfour announced the approval of H.M. Government of a scheme for rendering Palestine a national home for the Jews. This declaration is in no way intended to dispossess the Arabs in Palestine or in any way to interfere with their religious practices or their holy places in that country.

Apart from the agricultural and mineral wealth, strategic or communicational importance of the various territories, the whole Middle-Eastern area possesses very great political importance.

The Middle-Eastern area is the home of three of the world's greatest religions, those of Christianity, Islam and the Jewish faith. Though Islam is embraced by many races, its centre and core is situated in the Middle-Eastern area containing Mecca and Medina, the holy places of the Sunni, and Najaf and Kerbela, the holy places of the Shii.

From the middle of the fifteenth century the Islamic countries, stretching from the Atlantic coast to Peking, have stood between Europe and Russia on the one hand and tropical Africa, India and the Far East and the Pacific on the other.

Though the early voyages of discovery served to turn the flank of this position, it still remained solid and united. The cutting of the Suez Canal, the opening up of land communications between the Eastern Mediterranean and 'Iraq and Persia, penetrated and broke up the old solidarity.

The desire to protect vital sea communications led Great Britain to assume political relations with many states and to establish herself in a predominant position in Egypt, in parts of Arabia and Persia, and in the Persian Gulf.

This area has been the centre from which have radiated certain world-wide movements, the effects of which have been far-reaching.

In the first place, the Moslem peoples have attempted to free themselves from the ascendancy of the West; and, in the second, to adopt the military technique, the economic organization and political institutions of the Western peoples whose dominion they desire to shake off.

In Morocco, Egypt, Syria, Turkey, 'Iraq and farther east in Afghanistan and India, the desire to be rid of Western ascendancy has manifested itself in outbursts of nationalism. In Arabia the

traditional separatism of the Arab chiefs has partially given way to the unifying tendencies of the Wahabism of the Emir of Nejd.

Though in this attempt to employ force to secure their ends the Islamic peoples were certain to encounter defeat, and did so in every case save that of Turkey, they were able to secure substantial gains. That they were able to do so arose mainly from the war weariness and divisions of opinion among the Western peoples. In Egypt the outbreak of 1919 was followed by the Milner report, leading to the declaration of 1922. In Turkey military successes caused the substitution of the Treaty of Lausanne for that originally drafted at Sevres. In Afghanistan the defeat of the Afghans was followed by the British renunciation of control over the foreign policy of that country. In 'Iraq the mandate was transferred into a new understanding embodied in the Anglo-'Iraqi Treaty. In Arabia the defeat of the Wahabi forces of Ibn-Saud was followed by the agreements of Hadda and Bahra.

The importance of these movements to Great Britain was particularly great, because there are within the Empire a greater number of Moslems than in any other of the empires of the Western Powers, and because her vital sea communications with her Eastern Empire ran through the territories that were mainly affected by these outbursts of nationalism. In addition, the Imperial air services now in course of construction and development to the East and Australia and to South Africa must traverse these same countries.

I.—EGYPT.

1. Physical Features.

Egypt, though geographically part of Africa and owning a joint control over the Sudan, is essentially part of the Middle-Eastern area.

The total area of the country is 388,000 square miles; of this total the Nile valley, the delta and the oases, the cultivable and settled areas, occupy 13,600 square miles.

Egypt is divided into two great sections, Lower Egypt—*i.e.*, between Cairo and the Mediterranean—and Upper Egypt, that part lying between Cairo and Wadi Halfa.

The boundaries of Egypt are :—On the east, a line from Rafa on the Mediterranean to the Gulf of Akaba; on the west, from the Bay of Sollum along a line passing eastwards of the Jarrabub oasis to a point close to the intersection of Longitude 20° E. and Latitude 22° N.; on the south, Latitude 22° N., is the boundary with the Anglo-Egyptian Sudan.

2. Historical Survey.

At the present time Egypt is an independent sovereign state and is believed at no very distant date to be about to enter into treaty relations of the closest kind with Great Britain. These arrangements have as their aim the safeguarding of British communications to the Far East and Australia.

Whatever may be the ultimate arrangements arrived at for the protection of the Canal Zone, the importance of Egypt's geographical position in the scheme of Empire defence is so great that relations no less close than those of the past will continue to exist between her and Great Britain.

The opening of the Suez Canal in 1869 confirmed for Great Britain the importance of a country which Napoleon had invaded in 1798 as a first step towards an attack upon India.

A purchase of certain shares in the Canal Company from the bankrupt ruler of the country secured for Great Britain both a voice in the management of the new highway to India and an interest in the good government of Egypt.

The final bankruptcy of Egypt led to the joint intervention of France and Great Britain on behalf of the interested European nations, and a form of dual control over the Egyptian finances was set up.

The rebellion of Arabi, an Egyptian army officer who led the discontented military party, called forth a strong protest from France and England, but this failed to check the malcontents. A sudden change of cabinet in France left Great Britain alone to deal with the subsequent outbreak of revolt at Alexandria. Alexandria was bombarded, the Suez Canal secured and after the defeat of Arabi's forces at Tel-el-Kebir, Cairo was occupied in August, 1882.

Though the occupation was, in deference to European opinion, declared to be temporary, it was continued until 1902, when the general arrangements between France and Great Britain rendered the latter's position in Egypt less anomalous.

The work of Lord Cromer, the British Consul-General in Egypt, and others was mainly directed to the rescue of Egypt from bankruptcy and to the teaching of Egyptians to govern themselves.

This situation continued till 1914, when, on the ruling Khedive refusing to return to Egypt from Constantinople, a British Protectorate was declared and Egypt became the base for the Gallipoli and Palestine operations.

A Turkish attack upon the Canal was repulsed in 1915, and a final advance was made into Palestine, culminating in the capture of Jerusalem in 1918.

Soon after the Armistice, Egyptians, headed by Zaghlul Pasha the nationalist leader, asked for the abolition of the Protectorate

or, alternatively, permission to go to Paris to lay their case before the Peace Conference. These demands being refused, a prolonged period of unrest, accompanied by the assassination of British soldiers and civilians, followed.

A commission of inquiry, under the leadership of Lord Milner, was able, despite a declared "boycotting," to collect sufficient evidence to frame a report which recommended the grant of self-government to Egypt. In 1922 the grant of independence was made, subject to the reservation of four points which should be held over for future and friendly agreement. These points were concerned with the imperial communications passing through Egypt, the status of the Sudan, the protection of foreigners resident in Egypt, and the protection of Egypt against outside aggression.

Various attempts have been made to find a solution of these problems, but none have so far been successful. In 1929 a draft treaty of alliance between the two countries was prepared for submission to the Egyptian Parliament. The terms of the treaty are set out in full in Appendix A, Chapter XIV, pages 262-285.

3. Constitution and Government.

Following the declaration, in 1922, by H.M. Government of the independent status of Egypt, a constitution was promulgated in 1923. This provides that there shall be an hereditary monarchy, a senate and a chamber of deputies. The King nominates two-fifths of the senate and the remainder are elected, as are, also, all members of the chamber of deputies.

Despite the fact of Egypt's independence, the nationals of foreign Powers resident in Egypt have, by virtue of rights and treaties entered into with Turkey when Egypt was part of the Turkish Empire, certain capitulatory rights in respect of freedom from taxation or domiciliary visit by Egyptian police and exemption from the jurisdiction of local tribunals.

Mixed tribunals, composed partly of native and partly of foreign judges, decide in civil cases between natives and foreigners and foreigners of different nationalities; appeal may be made to the mixed Court of Appeal.

4. Resources.

Population.

The population at the 1927 census was 14,168,756, of which some 200,000 are Europeans, the Greeks forming a majority.

Apart from a small number of Bedouins living on the fringe of the cultivated area and Nubians (Berberines) living between Aswan and Wadi Halfa, the people, though not of pure descent, are homogeneous.

Over 90 per cent. are Muhammadans, and the Copts, the descendants of those Egyptians who adopted Christianity in the first century A.D., number 900,000.

Approximately 3,000,000 of the inhabitants occupy the twenty largest towns, the rest of the population living on and by the land.

The principal towns are Cairo (1,000,000), Alexandria (600,000), Port Said (100,000) and Tanta (90,000).

Agriculture is practically the sole occupation of the people, and cotton is the chief product. 7,000,000 cantars (1 cantar = 100 lb.), valued at £38,000,000, were exported in 1927. Other products are onions, cereals generally, cotton seeds and oils, hides and skins. The principal mineral products are phosphate rock, petroleum and manganese iron ore.

The cotton of Egypt is, with Sea Island cotton, the finest in the world, about half the total product being exported to Great Britain. Egypt imports from the United Kingdom cotton and woollen goods, coal, iron and steel manufactured goods to a value of £4,500,000.

5. Communications.

River.

The Nile, in Egypt as in the Sudan, plays an important part in the communications of the country. Between Wadi Halfa and Aswan the navigable reaches are broken by the cataracts. A lock permits passage through the Aswan dam, and thereafter transit can be carried through to Cairo. From Cairo the Nile divides into the Rosetta and Damietta branches.

Transit by river is rendered easier by the fact that the flow of the river is from south to north and the general direction of the prevailing wind is from north to south.

Transport is both by the sailing boat known as the felucca and by steam-towed barges.

The two most important canals are the Mahmudia, running from Alexandria to the Rosetta branch of the Nile and the Ismailia canal from Cairo carrying the fresh-water supply to the Canal zone via Ismailia to Port Said and Suez.

Rail.

With the exception of certain light agricultural railways, the entire system is state-owned. Railway communication is provided between Cairo and Alexandria and Cairo and Port Said. A branch at Ismailia connects with Suez, and from Kantara connection is made with the Palestine railways. The entire system from Alexandria to Aswan is now standard gauge. Railway repair shops, etc., are situated in Cairo.

CAPE—CAIRO RAILWAY.—The northernmost section of such a scheme will run through Egypt, and may in time be continued through Palestine to effect a junction with any route that may be proposed to bring Europe into railway communication with India. A detailed description of the route from the Cape to Cairo is given in Chapter XI, dealing with British possessions in Africa.

Road.

Metalled roads, except in the towns, are rare. The principal roads are along the canal banks and are unsuitable for heavy traffic. A road suitable for motor traffic, and which may ultimately be metalled, already runs between Cairo and Suez across the desert, following the old post road used before the Suez Canal was opened.

Ports.

There are only three seaports of first-class importance in Egypt—Alexandria and Port Said on the Mediterranean Coast and Suez on the Gulf of Suez.

Alexandria is the most important and best equipped harbour in Africa, and is the outlet for the Nile Valley.

At Suez are the refineries of the Anglo-Egyptian Oilfields Company, operating on the Red Sea Coast.

The Suez Canal.

The Suez Canal Company is a private French company registered in Egypt. The headquarters of the administration is at Port Said. The original undertaking was begun in 1866, and the Canal opened for traffic in 1869. In 1875 the British Government became, by purchase, the largest shareholder, and nominates ten members to the Administrative Council.

The concession was granted to the Company for ninety-nine years and expires in 1968, at which date it becomes the property of the Government of Egypt. Various attempts to settle the question of the ultimate disposal of the Canal have been made, so far without success. In 1888 it was determined by international agreement that the canal should be exempted from blockade, and the free use of the canal was guaranteed in peace or war to the vessels of all nations, whether armed or not.

The total length from Port Said at the Mediterranean end to Suez (Port Ibrahim) is 101 miles, with a minimum breadth of 147 feet. The maximum draught of water allowed for vessels is 32 feet.

To protect the sides of the canal from the wash of vessels, the maximum speed is five and a half knots, and special sidings every

few miles are constructed along the canal to allow vessels to pass each other. Searchlights are provided for night transits. The services of a canal pilot are obligatory.

The net tonnage, carried through the Canal in 1929 was 33,466,014, of which 57 per cent. was British.

The fresh-water canal leading from the Nile runs beside the canal, as does the railway from Cairo to Port Said and Suez through the junction at Ismailia.

At Kantara a ferry crosses the canal to link up with the Palestine Railway to Haifa.

6. The Defence Forces.

Service in the Egyptian Army is compulsory. Only a small fraction are, however, called for service. The total strength of the army is 12,500, comprising eleven infantry battalions, two squadrons of cavalry and four batteries of artillery. A few higher posts, including that of Inspector-General, are held by British officers.

There is a military school for the training of officers, in which a few British officers are also employed.

The training and establishment for the army follow generally those of the British Army.

British Troops in Egypt.

ARMY.—British troops in Egypt consist of the following units :—Cavalry, three regiments ; infantry, eight battalions ; artillery, six batteries ; and auxiliary troops.

The virtual control of Egypt is exercised in Cairo, in which the majority of British troops and air forces are stationed.

ROYAL AIR FORCE.—The Royal Air Force in Egypt consists of four squadrons and depots and one training school. Included in the Middle-East Command situated in Cairo are the air forces stationed in the Sudan, Palestine and Aden. The squadrons are distributed as follows :—

Heliopolis	...	...	No. 208 (A.C.) and No. 216 (B.) Squadrons.
Helwan	...	...	No. 45 (B.) Squadron.
Aboukir (Alexandria)			Aircraft Depot and Repair Shops.
Ismailia	...	...	No. 6 (A.C.) Squadron and No. 4 F.T.S.

Various emergency landing-grounds are distributed throughout the country.

7. The Defence of Egypt.

The defence of Egypt is to a large extent guaranteed by her position.

To the west, south and east the Libyan Desert, the Nubian Desert and the mountains of the Arabian Desert provide frontiers of great natural strength.

Egypt is open to attack from the following directions :—

- (a) From the Mediterranean.
- (b) From the Red Sea and Gulf of Suez.
- (c) From the Sinai Desert.

Any attack from the first two directions, to have any reasonable chance of success, must be based upon an unquestioned naval preponderance in the Mediterranean or the Indian Ocean. The sea approaches thus held and a force landed, Egypt does not present any natural features assisting the defence of the country. An invading army needs little save ammunition, the delta is flat, the Nile and canal systems provide ready means of transport, and adequate supplies of food and fodder are available over the whole area.

The approaches to Egypt from the Sinai direction have been used from historic times, and were those followed by the Turks in their invasion of the canal zone in 1915.

The boundary between Egypt and the mandated territory of Palestine having been drawn between Rafa and Akaba at the head of the Gulf of Akaba, the canal zone is fronted by an expanse of desert approximately 120 miles in width, across which three routes pass—the first from Rafa via El Arish to Kantara ; the second from Audja via Kosseir to Ismailia ; the third from Akaba via Nekl to Suez. Experience in the Turkish attack in 1915 proved that the Suez Canal itself constituted a defensive barrier of considerable strength.

The danger arising from a determined attack by aircraft against the canal and shipping in transit would appear to be considerable.

8. The Importance of Egypt in Imperial Defence and Communications.

The primary importance of Egypt lies in the centrality of its position. Midway between Asia and Africa, and between the Mediterranean and Arabian Seas and the Indian Ocean, it controls land and sea routes between three continents. Its position is therefore vital to Great Britain, since the most direct lines of communication to India and Australia pass through its territory, though alternative routes through Canada or round the Cape exist. The occupation of the country by any other Power would also involve a large increase in the garrisons of India,

as Egypt would then become, as Napoleon intended it to become, an advanced base for a campaign against India.

Taking Southampton, Halifax, Cape Town, Bombay and Melbourne to represent the five principal ports of the Empire, the distance between them and Port Said is on an average some 850 miles* less than are the average distances between the others, and in consequence Egypt is a most convenient centre at which to station military or air forces with a view to the most rapid reinforcement of any part of the Empire.

Further, in time of war its excellent climate, suitable training spaces and extreme fertility, combined with the possession of good railway communication and first-class harbours, render it an admirable base for operations against an enemy, while at the same time it stands as a defensive base to the British possessions on the East coast of Africa.

In Egypt, too, the air line of the Empire bifurcates, one branch proceeding southward to the Cape and the other eastward to Iraq, India and beyond. In course of time it will become the northerly terminus of any north-south African railway route, and will be an important junction in any connection that may be formed with a European-Asian railway system.

In the field of politics the position of Egypt has always been one of importance. By reason of its wealth and longer and fuller contact with Western civilization, it has taken a lead in the revolt of the East against the West, which leading position is further increased by its religious importance derived from the situation in Cairo of the famous Al-Azhar University, the sole training establishment for the religious leaders and teachers of Islam.

II.—PALESTINE AND TRANSJORDAN.

The mandated territory of Palestine occupies a north-south situation lying between French Syria to the north and Egyptian territory to the south. The Mediterranean forms its western boundary, while to the east the boundary with Trans-Jordan passes down the centre of the Jordan valley to the Dead Sea. The boundary to the north begins halfway between Tyre and Acre, bends northwards of Mount Hermon, thence south down the eastern shore of Lake Tiberias to Samakh.

In the centre of Palestine is the Judean plateau, running almost due north and south through Hebron, Jerusalem and Bethlehem. This plateau is flanked on the west by a well-watered coastal plain some hundred miles long by fifteen wide. Eastwards from the plateau the descent is abrupt into the great rift of the Jordan valley and the Dead Sea. Eastwards beyond the rift lie the higher and fertile areas of the Hauran, Gilead and Moab, which are situated in the mandated area of Trans-Jordan.

* For exact figures see Chapter IX.

In the coastal plain over thirty inches of rain falls per annum, and the area is extremely fertile and well cultivated.

Wheat, barley, maize, olives and olive oil, oranges and figs are the main agricultural products. Sheep, goats and camels are also grazed.

Lack of water handicaps the further agricultural development of Palestine. Various proposals have been made, the most practical of which would be the drawing of the waters of the Litani River in French Syria into the Jordan valley.

Mineral resources are not large, though traces of mineral oil exist. The Dead Sea, 1,300 feet below sea-level, is intensely salt and contains other salts, potash, etc., in vast quantities, which it is proposed in due course to utilize.

A recent concession has been granted to the Palestine Electric Corporation for the building of hydro-electric generating plants and general irrigation works in the Jordan valley. Afforestation has also been carried out over large areas.

The population of Palestine in 1929 was estimated at 1,000,000—Moslems numbering 650,000, Jews 150,000, Christians 76,000.

Jerusalem is the largest town, numbering 62,000. Jaffa and Haifa, the two principal ports, number 47,000 and 25,000 respectively.

Communications.

The total mileage of Palestine State-owned railways amounts to 775. The principal railway routes are :—(a) Kantara (Suez Canal)—El Arish—Raffa—Ludd—Tulkarem—Haifa, a total of 260 miles standard gauge; (b) Jaffa—Ludd—Jerusalem, 55 miles standard gauge; and (c) Haifa—El Hammeh, narrow gauge (3 ft. 6 in.), 55 miles.

The Haifa—El Hammeh railway links up with the Hejaz railway at Deraa, the section El Hammeh—Deraa being controlled by the French Government.

There is through communication with Egypt, trains connecting daily at Kandara (West) with Cairo, Alexandria and Port Said. There is also some 400 miles of road suitable for motor traffic.

Motor Transport.

The Nairn Desert Transport Company conducts a weekly trans-desert mail and passenger service by motor car between Haifa and Baghdad.

Air Routes and Royal Air Force in Palestine.

The Cairo—Baghdad—India air route traverses the country, the route followed being via Gaza and Ruthbah Wells.

Trans-Jordan.

The mandated territory of Trans-Jordan, governed by the Amir Abdullah, son of Husein, ex-King of the Hejaz, has a total population of 260,000. Its western boundary runs from the Gulf of Akaba up through the Dead Sea and Jordan valley. To the south and east lie the Hedjaz and the mandated territory of 'Iraq.

The Cairo—Baghdad—India air mail traverses the country, and a refuelling station is maintained by Imperial Airways at Ziza.

The Royal Air Force in Trans-Jordan and Palestine.

The following Royal Air Force units are stationed in Trans-Jordan and Palestine. Headquarters is at Amman :—

Amman	...	...	...	No. 14 (B.) Squadron.
Ramleh	...	...	...	Two armoured car companies.
Amman	...	...	...	One section armoured car company.
Haifa	...	...	...	One section armoured car company.
Roshpina	...	...	...	One section armoured car company.

Administrative control is exercised by the Air Officer Commanding Middle-East Area.

Strategic Importance of Palestine and Trans-Jordan.

The strategic importance of Palestine, which has been recognized from the earliest antiquity, is still of great importance to the Empire.

(a) It is to-day, as in the past, the principal land bridge between Eurasia and Africa.

(b) It assists in protecting the Empire's sea communications through the Suez Canal by constituting itself a northern protective base, an importance which will not grow less in view of the independence of Egypt lying south of the same vital line.

(c) It constitutes an important link in the imperial air communications between Great Britain and the Far East.

(d) The development of the agricultural and mineral wealth both of Palestine itself and of 'Iraq would be greatly facilitated by the establishment of rail communication between the two countries. A railway from Baghdad to Haifa and the construction of an oil pipe line from the Mosul area to Haifa would not only be a great commercial success, but would be of immense strategic importance for the fuelling of the Mediterranean Fleet and for the use of aircraft. Haifa and Palestine generally should then become the natural outlet for the wealth of the whole of a

vast area which is probably, with the exception of China, the most undeveloped in the world.*

III.—'IRAQ.

1. General Physical Features and Climate.

The territory known as 'Iraq comprises the ex-Turkish villayets of Mosul, Baghdad and Basra.

The boundaries of the modern state of 'Iraq are :—on the north, Turkish Kurdistan ; on the west, French Syria and the Arabian Desert ; on the east, Persia ; and on the south, L. 30° N. separating it from Koweit, which is a sphere of British influence.

'Iraq, with Western Persia, form an isthmus between the Persian Gulf and the Caspian Sea. Through the middle of this isthmus a ridge of mountains runs south-east to north-west, connecting with the main ridge of the Eurasian continent running from the Pyrenees to the Himalayas.

The plain of 'Iraq lies west-south-west of the first-named ridge. The total area of the country is 143,250 square miles.

The country may be divided into three principal divisions :—

- (i) The Plain.
- (ii) The Uplands.
- (iii) The Highlands.

THE PLAIN, constituting the greater part of the country, is formed by the delta of the Tigris and Euphrates rivers. The area of the Plain lies between the north of the Persian Gulf and a line drawn between Falujah and Khaniquin. The soil is alluvial and stoneless. The rivers are a few feet above the level of the surrounding country, and are therefore liable to flood the area when the snow melts each spring in the Kurdistan and Armenian mountains. The average rainfall is about six inches per year. Cultivation depends in the main upon irrigation, the rainfall being insufficient. The principal irrigation works are the Hindyia Barrage, the Beda Barrage and the Daghanah Barrage. The date trade of the area round Basra is very important, constituting 75 per cent. of the total world consumption.

THE UPLANDS.—The Uplands comprise the area between the Plain and the Highlands, and may be included within a line drawn from Faish Khabur, Dobruk, Aqra, Deraa, Chem-Chemal and Khaniquin. The southern section of this area is generally unfertile, but to the north the soil is rich and the rainfall adequate.

* A recent Press announcement states that the construction of the Mosul pipe line from the oil areas in 'Iraq will shortly be begun.

A single pipe line will run from 'Iraq to Haditha on the Syrian frontier, after which it will split into two branches, one going across Syria to debouch at Tripoli, the other passing by Trans-Jordania to the British outlet at Haifa.

THE HIGHLANDS.—The Highlands lie north-east of the line mentioned above. The mountains are lofty, reaching 14,000 ft., and are snow-covered during winter, and rainfall is heavy during the season.

Rivers.

Both rivers rise comparatively close together in the Anatolian Highlands. The Tigris falls rapidly to Mosul, gradually becoming less swift as it approaches Baghdad.

The Euphrates, 1,800 miles in length, rises in Mount Ararat, passes from the Highlands of Anatolia through French Syria, and finally joins the Tigris near Kurna. From their junction at Kurna the two rivers form the Shatt-el-Arab. This latter section of the river is tortuous and sluggish. It is emptied into the Persian Gulf at Fao, Basra lying roughly half-way between Kurna and Fao.

2. Historical Survey.

The early history of 'Iraq needs passing mention if only to record that its wealth attracted continuous attention until the Mongols in the thirteenth century, by destroying its ancient irrigation system, destroyed at once its fertility and consequently its attractiveness to the foreign conqueror.

In the seventh century A.D. the Persian ruler of 'Iraq had been defeated by the Moslem armies from Arabia. In the middle of the sixteenth century 'Iraq passed to the Turks. In the third decade of the seventeenth century the East India Company had an agent resident at Basra. In 1802 the British resident was formally recognized by the Porte.

Napoleon's campaigns in Egypt and Palestine caused serious alarm to the British Government concerning their communications with India. In 1839 Colonel Chesney transported a steamer from the Mediterranean and successfully performed the journey down the Euphrates to the Persian Gulf. The English undertook the duties of surveying, lighting and policing of the Gulf, and they were forced to enter into political relations with Mesopotamia.

During the nineteenth century British influence in Mesopotamia steadily increased. The development of British trade, the navigation by British vessels of the Mesopotamian rivers and the measures taken to suppress piracy gave the British Government a "paramount local influence" (Colonel Rawlinson's Report, 1852). The establishment of a British mail service between Basra and India and the construction by British agency of internal and external telegraph and cable facilities, also enhanced the British position. British influence in the Gulf was further increased by reason of the treaty entered into with the Sheiks of Koweit and Muhammera.

The influence of Germany in Mesopotamia dates from about 1885, and steadily increased until, in 1903, her efforts were

successful in the attempt to secure the concession for the construction of the Baghdad Railway. Dr. Rohrbach, in his work "Die Bagdadbahn," stated: "All economic measures we may take in Turkey are only a means to an end, not an end in themselves." The end was plainly the establishment of German political ascendancy from the North Sea to the Indian Ocean. It was again another of the many challenges of land power to sea power.

In 1901 a German expert reported the oil-bearing district of Mosul and Baghdad "to be among the richest in the world." An agreement was concluded in 1914 between the Porte, Great Britain and Germany, whereby a company was created as the Turkish Petroleum Company. This agreement was rendered invalid by the war, and in 1915 the Anglo-Persian Company took over the interests. The British Government is a shareholder in the company.

As a result of the war and the Treaty of Lausanne, Turkey renounced her rights in 'Iraq, which was mandated to Great Britain by the League of Nations. In 1921 the Emir Faisal, son of Husein, ex-King of the Hejaz, was proclaimed King. In 1922 the British Government entered into treaty relations with the new Government of 'Iraq.

The British Government will use its good offices to facilitate the entry of 'Iraq into the League of Nations, and 'Iraq undertakes in all matters concerning international and financial obligations and interests of the British Government to accept the advice of the British High Commissioner. It is proposed that 'Iraq shall shortly be admitted to the League of Nations.

3. Constitution and Government.

Originally allotted to Great Britain as a mandated area, the Anglo-'Iraqi Treaty, signed in 1927, recognizes 'Iraq as an independent State.

The constitution of 'Iraq is laid down in the Organic Law, providing for a limited monarchy, a senate of 20 nominated members, and a lower house of 88 elected deputies.

For administrative purposes the country is divided into fourteen liwas under a Mutassarif, and there are further sub-divisions of these areas into qudhas and nahiyahs.

4. Resources.

The population numbers 2,850,000.

'Iraq was once the granary of the world. The Mongols, however, destroyed the irrigation works and rendered the country a desert save for an area lying close to the river banks.

Agriculture is still the main occupation of the people. Wheat, barley, dates and wool are the principal exports.

Cotton-growing is believed to be practicable on a large scale. The Cotton Growing Association is encouraging by every means the growth of cotton, and Government assists by experiments and the control of seed culture.

The outstanding need of the country is labour and capital. The re-building and re-establishment of the old irrigation systems would indubitably restore Iraq as one of the richest agricultural areas in the world.

Oil Resources of Iraq.

The oil resources of the country are believed to be abundant and are being developed by two companies, the Turkish Petroleum Company and the Khaniquin Company, the latter being a subsidiary of the Anglo-Persian Oil Company.

The Turkish Petroleum Company commenced drilling operations under license in the areas round Kirkuk, Shergat and Jabal Hamrin.

The Khaniquin Oil Company operates in the area round Naft Khana, whence a pipe line thirty miles in length carries the oil to the company's refinery at Alwand, five miles from Khaniquin, the finished product being further piped to the main storage tanks at Khaniquin station.

The Anglo-Persian Oil Company operates a large field in Southern Persia at Maidun-el-Nafta, whence the oil is piped to the refinery at Abadan.

At Hit on the Euphrates are large asphalt deposits.

River.

5. Communications.

The Tigris forms the chief means of communication. Any ocean-going vessel that can cross the bar can proceed as far as Basra. Thence vessels of lighter draught can reach Baghdad. The Euphrates is only navigable by vessels of the shallowest draught. Conditions for inland water transport are variable, the river being at its highest in April and May; it falls gradually in July and August, and from then to November the river is at its lowest.

Roads.

In the ordinary sense of the term there are no roads in Iraq. Of nearly 5,000 miles of track roads, only a few score miles are metalled. Except after rain it is, however, possible to utilize these track roads. The principal roads are as follows :—

- (i) Baghdad—Kut-el-Amara—Basra.
- (ii) Baghdad—Hilla—Diwaniyah—Samawah.

- (iii) Baghdad—Baqubah—Khaniquin—Kermanshah—Teheran.
- (iv) Baghdad—Baqubah—Kizil-Robat—Kirkuk—Chemchemal.
- (v) Baghdad—Samarra—Shergat.
- (vi) Baghdad—Kerbela—Najaf.

Rail.

The total mileage of all railway track in 'Iraq is about 750. The principal routes of the system are :—

- (a) Basra—Nasiriyeh—Samawah—Hillah—Baghdad : 354 miles (metre gauge).
- (b) Baghdad—Samarra—Baiji : 136 miles standard gauge. Baiji is approximately 120 miles short of Mosul.
- (c) Baghdad—Kizil-Robat—Khaniquin : 109 miles.
- (d) Baghdad—Khaniquin—Kirkuk.

Desert Motor Route.

Two desert routes to the Mediterranean are in operation :—

- (a) Baghdad, via Falujah, Ramadi, Rutbah, Damascus, Beyrout, and
- (b) Mosul via El Badi, Souar, Deir-el-Zour, Aleppo.

Air Routes.

Baghdad is an important junction on the air routes between Europe and the Far East, since Imperial Airways, the Dutch K.L.M. and the French Air-Orient all run services to Baghdad or beyond.

The Junkers Company, also, operates an air line from Teheran which links up with a service via Baku to Moscow. The German Luft-Hansa also proposes shortly to start a Berlin—Baghdad service. There will thus shortly be five separate air routes from different parts of Europe converging upon the city of Baghdad, which may thus become an important centre for the future penetration of Asia by air. German air lines operating in Persia will in time link up with the Russian Far Eastern air services and with the Luft-Hansa already operating in China.

6. Defence Forces.

The 'Iraqi Army consists of the following :—

- Three cavalry regiments,
- Two field and three pack batteries of artillery,
- Seven infantry battalions,
- Medical and Veterinary Corps, etc.

British Air Forces in 'Iraq are as follows :—

HINAIDI.

Two bomber squadrons (Nos. 55 and 70).

Two armoured car sections.

Miscellaneous units (Headquarters, Supply, Repair, etc.)

BASRA.

No. 84 (Bomber) Squadron (Shaibah).

No. 203 (Flying Boat) Squadron.

One armoured car section.

Base supply depot and miscellaneous units.

MOSUL.

One section armoured cars.

Supply depot.

7. The Defence of 'Iraq.

Contrary to the general strategic "lay-out" of the Empire, 'Iraq possesses few natural defensive boundaries. Only to the south can reinforcement be drawn from the sea. To the north and east the country is dominated by the highlands of Kurdistan and the Persian Hills. To the south-west an ill-defined boundary separates the country from the lawless tribes of Arabia.

The Brussels line between Turkey and 'Iraq provides a naturally defensive barrier to the north, though a practicable route to Mosul leads between Faish-Khabur and Zakho. The lack of roads and the difficulties of such as exist constitute the chief protection of the frontier. A gap of nearly three hundred miles between Shergat and Nisibin, the terminus of the old Berlin—Baghdad railway, also constitutes a feature of strength. The presence of the French in Syria should also provide a base from which the communications of an enemy from the north might be attacked.

The tribes on the borders have for centuries been lawless. Inter-tribal raids and attacks upon settled villages have been at once a national sport and an economic necessity.

The disposition of the Royal Air Force indicates the main scope of their duties in 'Iraq.

Cantonments at Hinaidi constitute a central station and depot. Two bomber squadrons and two sections of armoured cars are a guarantee of order in Baghdad and the near-by cities. One squadron and one armoured car section are situated near the northern boundary, one in which active operations against an invader would be undertaken. The unruly Kurdish tribes can be watched from this area. One squadron at Shaiba serves to protect the southern boundary, where contact with Arab tribes of the desert may be expected.

The value of aircraft in effecting the control and defence of 'Iraq lies mainly in the rapidity of movement and ability to secure the full effect of surprise. Raiding tribes can be driven off in many cases before they have reached their objective, or severely punished before they can return to their base. This serves to ensure that the actual perpetrators are punished. Incipient rebellion can be checked before tribal concentration has been effected, and in many cases the mere threat of air action has been sufficient to secure peaceful withdrawal. The country is generally suitable for the employment of aircraft, landing-grounds being plentiful and visibility good. The general lack of communications, etc., suitable for ground troops is not acutely felt by aircraft. The use of aircraft in the place of ground forces has resulted in marked saving of expense.

It is a generally expressed opinion that 'Iraq would be unable to maintain an effective defence of her frontiers on the complete withdrawal of British assistance, unless compulsory military service were instituted, a proceeding that would meet with considerable hostility from the population and would greatly strain the financial resources of the country. It appears probable that British air forces will still be necessary to the defence of 'Iraq even after the country has been admitted to the League of Nations, when full account is taken of the large issues at stake.

The Importance of 'Iraq.

The strategical importance of 'Iraq to the Commonwealth is self-evident. It occupies to-day, as in the past, a unique position as the heart of the Middle East. Caravan routes from Kurdistan and Persia gravitate naturally towards Baghdad.

Though the building of the connecting link between Shergat and Nisibin, on the old Berlin—Baghdad Railway, is unlikely, railway communication between the Eastern Mediterranean and Karachi must pass through Baghdad, and 'Iraq is thus an outpost of the defence of India. Its importance in the development of "land" air routes has already been noted; the recent establishment of a squadron of seaplanes at Basra may indicate a further extension of Royal Air Force activities in the country, and suggests that Basra may become one of the Empire air ports of the future.

The Persian Gulf is, further, the only port of ingress west of Karachi which opens on to land routes leading to important regions situated at the head of the Persian Gulf.

From the head of the Persian Gulf north-west the Euphrates Valley offers an easy approach towards Constantinople.

From the Gulf an approach north-west past the Caspian leads into European Russia through the gap between the eastern end of the Caucasus and the Caspian by railway communication through Baku. To the east of the Caspian an approach may be

made to Asiatic Russia, already linked by rail to Europe and Siberia. It is in these respects that 'Iraq becomes a factor in the defence of the Indian Ocean.

Communications between Arabia and Persia also pass through the plain of the Shatt-el-Arab.

IV.—THE PRINCIPALITIES OF THE ARABIAN PENINSULA.

Arabia is essentially a desert country, occupying an approximate area of a million square miles.

On the west it is bounded by the Red Sea, on the south by the Indian Ocean, and on the east by the Persian Gulf; to the north lie Syria, Trans-Jordania and 'Iraq.

Down the centre of this area an elevated mountain range runs roughly parallel with the Red Sea. From the central core the land surface slopes steadily down to the sea-level, except in the extreme south-eastern corner, where the mountains of Oman rise to heights of 10,000 feet above the sea.

The whole country, with two exceptions, consists of vast tracts of sand waste and desert steppe. Along the coast runs a plain of varying fertility, while oases or groups of oases are to be found in the high plateau of the Jabel Tawaik.

The total population of the whole peninsula is estimated at seven millions.

The principal divisions of the peninsula are as follows :—

Hejaz.

Capital, Mecca. The area of Hejaz is approximately 150,000 square miles and it has a coast line along the Red Sea of about 1,200 miles. The population of the whole area is about 900,000. Mecca (70,000), Medina (20,000) and Jeddah (30,000), the principal port, are the chief cities. The principal source of revenue is derived from pilgrims visiting the Holy City.

Asir.

Capital, Sabya. The total area of Asir is approximately 35,000 square miles, and it is, with Yeman, the most fertile district of the peninsula. The total population is about 1,500,000. Dates and coffee are exported in considerable quantities through the port of Jisin. The ruler, the Idrisi Sayyid Hasan, is akin to the Wahabis in religious outlook, and he has acknowledged the overlordship of Ibn Saud, King of Hejaz and Nejd.

Yeman.

Capital, Sanaa. Yeman, the most southerly of the Red Sea districts of the peninsula, has a total area of 75,000 square

miles and a population of 2,500,000. The country is barren along the coast, but in the inland plateau a more plentiful rainfall enables considerable cultivation to be undertaken. Wheat, barley and coffee are grown. Coffee and dates are exported through Hodeida. The ruler of Yeman, the Zeidi Imam Tahya, claims descent from Ali, the fourth holder of the Caliphate, and holds religious beliefs akin to those of the Senussi. The holder of the office of the Imamate of Sabya had been recognized by the Sultan of Turkey as ruler of all parts of the Yeman plateau where the Zeidi form of Shi'ism was practised. The Imam was in alliance with Turkey during the war. In religious matters the Zeidi is opposed to the Wahabis, but politically the terms on which the Imam stands with Ibn Saud are not unfriendly.

Nejd.

Capital, Rijadh. Nejd occupies part of the central plateau of the peninsula. The total area is some 10,000 square miles, and the settled population is 250,000. The Nejd is the centre of the Wahabi movement under the Emir Abdul Aziz Ibn Saud, now King of the Hejaz and Nejd.

Oman.

Capital, Muscat. Oman, an independent state, occupies the south-eastern corner of the Arabian Peninsula. The area is about 85,000 square miles, and it has a total population of 500,000. The coast line of 1,000 miles extends down the Persian Gulf. Inland lies the Great Desert. The closest relations have long existed between the Sultan of Oman and the Indian Government.

Kuweit.

Capital, Kuweit. The state of Kuweit is situated on the north-western coast of the Persian Gulf. The population is estimated at 50,000. The ruler is subsidized by the British Government. Kuweit possesses at Kosima the finest harbour in the Persian Gulf.

The Bahrein Islands.

Capital, Manama. The Bahrein Islands, forming an archipelago in the Persian Gulf, are situated about twenty miles from the El Hasa coast. The total population is about 100,000. The ruler is in treaty relations with the Government of India.

The greater part of the trade of Nejd and Hasa passes through the port of Manama.

The pearl fisheries of the islands are famous.

Aden.

Aden is a volcanic peninsula on the Arabian coast, lying a hundred miles east of the straits of Bal-el-Mandeb. The settlement includes the peninsula of Little Aden and the town of Sheik Othman. The population of the whole protectorate is slightly over 100,000. Aden is an important fortified coaling station.

During the war a railway (metre gauge) was constructed to Lahej and has been continued to Habil. It is now closed.

The Air Ministry is responsible for the defence of the peninsula.

The military and air forces situated at Aden and under the command of the Officer Commanding the Royal Air Force are :—

One bomber squadron (No. 8).

One armoured car section.

One heavy battery Royal Artillery.

One anti-aircraft section, Royal Artillery.

One fortress company, Royal Engineers.

Communications in Arabia.

Roads and Caravan Routes.

The external and internal communications of Arabia are rendered difficult both by reason of geographical factors and the turbulence of the nomadic tribes.

The principal routes in Arabia have been mainly determined by the pilgrim traffic from the outside world to the holy cities of Mecca and Medina.

Railways.

The only railway in Arabia is the southern section of the Hejaz Railway, from Ma'an to Medina. It is a single track (gauge, 1·05 metres), and was rapidly and unevenly laid with steep gradients and insufficient sidings. It was ostensibly built for pilgrim traffic, and was largely paid for by the contributions of the faithful, but its real purpose was to increase Turkish influence in southern Arabia.

At various times extensions of this line from Medina via Mecca to Aden or from Ma'an to Akaba and thence to Koweit have been considered, but it is probable that expense both of construction and maintenance would be excessive. The strategic importance would be considerable in that rapid communication between the Mediterranean and Red Seas would be provided.

Historical Survey.

The history of the Arabian Peninsula is from the very nature of the country itself difficult to follow.

Arabia has never owed suzerainty to any single authority since the decay of the Caliphs of Baghdad.

The Sultan of Turkey had, by virtue of his spiritual position among the Moslems, always exercised in one part or another of the peninsula and at one time or another a certain influence. This influence had, moreover, been not infrequently in opposition to that exercised by Great Britain.

Great Britain first entered into treaty relations with the Sultan of Muscat in 1798, and occupied Aden in 1839. This occupation was clearly intended to supply a fortified position as a half-way house to India.

The peninsula has been for centuries divided among the various Emirs or Sultans, who maintained their position by constant watchfulness against the attack of others. One or other would at times, by virtue of the possession of some geographical advantage or of some peculiar spiritual leadership, rise to the position of superiority among his fellows. The principal autonomous principalities of the peninsula were the Sherifate of Mecca, the Principality of Asir, the Inamate of Yeman, the Emirates of Shammar and of Nejd, the Sultanates of Muscat in Oman and Hadramaut, and the Sheikdom of Koweit.

When Turkey entered the war against the Allies, apart from the danger of a Holy War, there did exist the possibility that the Central Powers might threaten British sea communications with the Far East and, in addition, endanger the East African possessions of the Allies and those in the Middle and Further East.

In consequence of these dangers, Great Britain sought for allies among the principalities. The chief Emirs who entered into new alliances with Great Britain were the Sherif of Mecca and the Emir of Nejd.

The position of the Sherif of Mecca was enhanced by the possession within his dominions of the holy cities, while that of the Emir of Nejd had been greatly increased by his connection with the religious revival known as Wahabism.

The military assistance rendered by the Emirs was probably not in proportion to the subsidies paid to them during the period of hostilities, and it was certainly not in proportion to the claims advanced by them on the conclusion of the war.

The Sherif of Mecca quickly styled himself successively King of the Hejaz and King of the Arabs.

A dispute concerning the Oasis of Khurma, claimed both by Mecca and Nejd, precipitated a war between the two kingdoms. In 1921 the Emir Ibn Saud captured Hail, the capital of Ibn Rashid, Emir of Shammar, an ally of Mecca, and hereditary enemy of Ibn Saud. In 1924 Tait, the summer capital of Hejaz, fell. Husein, King of Mecca, abdicated in favour of his son Ali, who in his turn abdicated in 1925. Ibn Saud entered Mecca in

1924 and Medina in 1925. Jedda was entered in 1926, in which year Ibn Saud was proclaimed King of Hejaz and Sultan of Nejd.

In 1927 this position was recognized by Great Britain and the independence of his territories guaranteed.

The King of the Hejaz and Sultan of Nejd thus occupies a predominant position in the entire peninsula except in the territories of the chiefs of the southern coasts, the Principalities of Kuwait and Bahrein, and the chiefs of the Oman coasts, all of which enjoy to a greater or less degree the protection of Great Britain.

The area known as the Middle East is thus seen to represent a series of difficult questions, political and strategic.

Recent developments in imperial air communications to the Far East and Australia and to the Cape have served to increase the importance of an area in which is situated the land bridge between Eurasia and Africa and through which also pass the sea communications of all nations between Europe and the Far East.

Politically the area has been broken up into a number of small independent states who, though intensely nationalist in outlook, are untrained in self-defence or in the technique of modern government, and are therefore less capable than the old Turkish Empire of safeguarding Europe's sea communications with the East.

The importance of the area to the Commonwealth can be easily recognized. The desire to protect vital sea communications led Great Britain to assume political relations with many of the states in the Middle Eastern area and to assume a predominant position in Egypt and in parts of Arabia and Persia ; Great Britain also undertook the effective policing and control of the Persian Gulf.

The increasing importance of air communications and the change in the balance of power in the Pacific have made the control of the Middle-Eastern area a question of vital importance to Australia and New Zealand, which are, until the Singapore base is completed, protected by a fleet whose nearest effective base is in the Mediterranean.

The main supplies of oil for the Navy, being drawn from the oilfields of southern Persia, must transit this area *en route* to Malta and Great Britain, and the recent agreements between the French and British Governments for the pipe line from Mosul to the eastern end of the Mediterranean will clearly relieve Great Britain of some anxiety.

APPENDIX A.

PAPERS REGARDING THE RECENT NEGOTIATIONS FOR
AN ANGLO-EGYPTIAN SETTLEMENT.

No. 1. Memorandum on the Negotiations.

1. The Egyptian delegation consisted of Mustapha Nahas Pasha, the Prime Minister, Wacyf Ghali Pasha, the Minister for Foreign Affairs, Osman Moharrem Pasha, the Minister of Public Works, and William Makram Ebeid Bey, the Minister of Finance. The negotiators on behalf of Great Britain and Northern Ireland were the Secretary of State for Foreign Affairs, the Secretary of State for Dominion Affairs and for the Colonies, the Secretary of State for War and the Secretary of State for Air. Representatives of His Majesty's Governments in the Commonwealths of Australia and New Zealand and the Government of India attended as observers in response to an invitation addressed to those governments before negotiations were opened.

2. Apart from such opportunities as offered from time to time for informal conversations with members of the Egyptian delegation, fourteen plenary meetings took place between the 31st March and April 17th. The first plenary meeting was devoted to a general statement of the Egyptian position which Nahas Pasha was invited to translate into actual formulæ. After they had been considered by the British delegates, discussion was commenced with the Egyptian delegation of the British proposals of last year to which King Fuad had referred at the opening of the Egyptian Parliament on January 11th in the following terms: "His Britannic Majesty's Principal Secretary of State for Foreign Affairs has presented to the Egyptian Government proposals which are inspired by a spirit of friendship and conciliation. Our Government will be happy to submit these proposals to you and hopes to undertake negotiations with the British Government in a spirit of conciliation and friendship with a view to a firm and honourable agreement between the two countries." These proposals are here reproduced as Paper 2. Comparatively little difficulty was encountered over Clauses 1 to 7, and it proved possible at an early stage of the negotiations to reach agreement on the text of articles in the proposed treaty corresponding to these clauses and to Clauses 14 and 15.

3. After discussion lasting over several meetings, it was agreed that the substance of Clauses 3 and 10 of last year's proposals

should be embodied in an exchange of notes, though in the case of Clause 10 the Egyptian delegation had declined to accept anything which would be represented as imposing a fresh obligation upon Egypt. The British negotiators, on the other hand, while appreciating the desire of the Egyptian delegation to facilitate progressively the Egyptianization of the Egyptian Government services felt entitled to require some undertaking from them that the elimination of British influence through the termination of the employment of British officials would not involve the introduction of some other foreign influence in its place.

4. Clause 11 of the 1929 proposals dealing with the capitulations gave rise to considerable discussion, though the difficulty lay more in agreeing upon what was to figure in the connected exchange of notes on this subject than in evolving a satisfactory text for the corresponding article of the treaty. Complete textual agreement on this important and complex subject was not, in fact, achieved until a very late stage in the negotiations. As regards Clause 12, relating to diplomatic representation, it was agreed that the precedence in relation to the representatives of other Powers which the first British Ambassador would enjoy in Egypt in virtue of his diplomatic rank would be reserved to his successors by a provision to this effect in notes to be annexed to the treaty.

5. The defence of the Suez Canal, which formed the subject of Clause 9, gave rise to very lengthy discussion. The Egyptian delegation had first suggested that all British forces should be concentrated at one point on the east bank of the Canal, first Port Fuad and subsequently Kantara being the points proposed. When these localities were shown to be inadequate for the purpose the Egyptian delegation eventually agreed to the concentration of the forces in question to the west of the Canal in the neighbourhood of Ismailia, subject to a reduction from 25 to 20 years of the period during which the treaty would not be open for revision, except, of course, in the case where the parties thereto might agree to proceed to such revision at an earlier date (Articles 8 and 14 of Paper 3).

6. It was early recognized that the Sudan, the subject of Clause 13 of the 1929 proposals, was likely to present a formidable problem to the negotiators. The insertion of the words "without prejudice to Egypt's rights and material interests" in the treaty article as agreed before Easter and of a sentence in the connected note providing for no discrimination in the Sudan between British subjects and Egyptian nationals in matters of commerce and immigration or the possession of property, furnishes no measure

of the time devoted to discussion of all aspects of the question. An effort was made to meet the Egyptian point of view by the introduction of an entirely new and general provision (Article 15 of Paper 3) under which the High Contracting Parties agreed, if either of them should so request, to enter into friendly discussions within one year from the coming into force of the treaty with regard to any question arising out of the application of any article of the treaty with respect to which any difficulty might have arisen. At one point in the discussions the prospect of agreement on these lines seemed hopeful.

7. Discussion of the provisions which should figure in the note had necessarily to proceed more or less concurrently with that of the connected articles, and just before the Easter recess there appeared to be good reason to hope that complete agreement might be achieved not only on the articles of the treaty, but on the almost equally important note. In so far as the latter document related to the retention of the Financial and Judicial Advisers for the full period of their contracts, agreement had, in fact, been reached, and in regard to the European element in the City Police, the British negotiators were prepared to fall in with the strongly-urged Egyptian proposal that the interests of public security would best be served by providing that the reduction in their numbers should take place gradually over the whole period of five years during which the European element was to be retained. The passage relating to the capitulations was drafted in the light of discussions which had taken place between British experts and members of the Egyptian delegation, and it was thought that it might prove acceptable to the latter. As regards the military provisions, agreement in principle appeared to have been reached as to the numbers of the British military and air forces for whom accommodation was to be provided, their location and the disposal of the properties which they would vacate on transference to the neighbourhood of the Canal. On the morning of April 17th, however, Nahas Pasha informed the British negotiators that the Egyptian delegation could not commit themselves to accept the treaty as they did not feel that their requirements in regard to the Sudan had been adequately met. His Excellency asked for time to consult his colleagues in Cairo and for a copy to send to them of the proposed treaty and notes (Paper 3) in the form in which they then stood. Further negotiations were accordingly adjourned until April 29th, though a further adjournment was rendered necessary by the delay in the return of the messenger whom Nahas Pasha had dispatched to Cairo.

8. This was the position when proceedings were resumed on the afternoon of May 5th. Nahas Pasha then communicated a

complete but modified draft treaty with two alternatives for the Sudan article together with a new draft of the notes to be annexed to the treaty. These documents constitute Paper 4.

9. The alternative Egyptian drafts of the Sudan article provided either that the question of the Sudan should be reserved for future negotiations within one year from the ratification of the treaty, or that the question of the Sudan should be reserved for future negotiations, and that meanwhile the *de facto* position obtaining in the Sudan before 1924 should be restored. Similar suggestions had already been made to and rejected by the British negotiators before Easter. The Egyptian delegation were informed that neither of these drafts was acceptable, and that it was difficult to see why so many changes had been made in the draft of the treaty and note as it stood on April 17th. It was pointed out that the British negotiators had agreed before the adjournment for Easter (*cf.* paragraph 6 above) to insert a new general article in the treaty providing for friendly discussions within one year from the coming into force of the treaty with regard to any question arising out of the application of any article of the treaty with respect to which any difficulty might have arisen. It was observed that that article had been omitted from the draft which the Egyptian delegation had communicated. Moreover, the Egyptian delegation had inserted an entirely new article which provided that "any agreement or declaration or other bilateral or unilateral acts which are in opposition to the present treaty are null and devoid of effect."

10. Nahas Pasha was informed that unless he agreed to the restoration of the British draft of Article 11 no treaty was possible; it would, indeed, be unfortunate if he could not accept the article in that form, for the passage of time and the new atmosphere created by the alliance might render much less formidable difficulties which to-day appeared insoluble. At the meeting which took place on the following day the Egyptian delegation expressed their willingness to accept the British draft with two minor amendments, provided the British negotiators agreed to their putting in a statement of their position in the form of a note. The amendments proposed were the addition of the words "and settling the question of the Sudan" in the first sentence, and of the words "as one of the consequences" in the second sentence. The note which the Egyptian delegation proposed was to the effect that the Sudan article did not in any way affect Egypt's right of sovereignty over the Sudan and the joint administration thereof by the two High Contracting Parties. The Egyptian delegation were informed that their counter-draft and note combined were unacceptable.

11. On the afternoon of May 6th the Egyptian delegation said that they were prepared to accept the original wording of the British draft article with the addition of a sentence to the effect that the High Contracting Parties agreed, if either of them should so request, to enter into friendly discussions within twelve months of the coming into force of the present treaty with regard to the application of 1899 Conventions (Papers 7 and 8). The Egyptian delegation, however, objected to the wording of the passage in the note providing for no discrimination in the Sudan between British subjects and Egyptian nationals; they wished it to be made clear that the immigration of Egyptians into the Sudan would be subject to no restrictions.

12. Proceedings were resumed on May 7th at 8 a.m., and continued with two brief intervals until 3.30 a.m. on May 8th, by which time agreement had been reached (see Paper 5) on all the articles of the treaty apart from the Sudan article. In so far as concerns the notes the wide divergencies between the British draft (Paper 3) and the Egyptian counterdraft (Paper 4) had in some cases been bridged completely; in others agreement was hoped for as the result of direct discussion between members of the Egyptian delegation and the Secretaries of State for War and Air and their respective experts, but the actual wording of the various paragraphs embodying it was still under discussion. In regard to the important and complex question of the capitulations (*cf.* paragraph 4 above), it was arranged that a separate exchange of notes should take place, the agreed text of which appears as Paper 6.

13. With regard to the Sudan, however, it was not possible to arrive at any formula which would satisfy the Egyptian demand for the right of unrestricted immigration of Egyptian nationals into the Sudan. A suggestion that the Governor-General would not exercise "unreasonably" the right which any government must possess to control immigration in the interests of its own nationals had to be abandoned as the Egyptian delegation insisted on the omission of the word "unreasonably." Further progress was impossible, and the Egyptian delegation were finally informed that the treaty could only be saved if they would accept the text of the Sudan article and paragraphs as they appear in Paper No. 3 with the two amendments in the article (*cf.* paragraph 10 above), for which they had pressed and to which the British negotiators were ready to agree—*viz.*, the addition of the words "and settling the Sudan question" after "the Conventions of 1899," and the omission of the word "Accordingly" at the beginning of the second sentence, which would run "The Governor-General shall, as one of the consequences of the 1899 Conventions,

continue . . ." The Egyptian delegation undertook to communicate their decision later in the day at 11 a.m.

14. When the Egyptian delegation returned, they said that they could not continue the negotiations unless His Majesty's Government modified their position. They were informed that the British negotiators could not modify the proposals which they had made overnight. This communication led to the termination of the negotiations. A formal meeting followed at which speeches were made by the heads of the two delegations expressing regret that the efforts which had been made by both sides to reach agreement during the last few weeks had failed. The Secretary of State for Foreign Affairs made it clear to the Egyptian delegation that, if they found after their return to Egypt, and after discussion with their friends there, that there was any hope of the draft treaty becoming an accepted instrument, it was still available, and he and his colleagues were prepared to try to reach agreement with regard to the few remaining passages in the note annexed to the treaty in order to make signature possible.

No. 2. The 1929 Proposals for an Anglo-Egyptian Settlement.

DRAFT CLAUSES.

1. The military occupation of Egypt by the forces of His Britannic Majesty is terminated.

2. An alliance is established between the High Contracting Parties in consecration of their friendship, their cordial understanding and their good relations.

3. Egypt, being anxious to become a member of the League of Nations, will present in the conditions prescribed by Article 1 of the Covenant a request for admission to the League, which His Britannic Majesty undertakes to support.

4. Should any dispute with a third State produce a situation which involves a risk of a rupture with that State, the High Contracting Parties will concert together with a view to the settlement of the said dispute by peaceful means in accordance with the provisions of the Covenant of the League of Nations and of any other international obligations which may be applicable to the case.

5. Each of the High Contracting Parties undertakes not to adopt in foreign countries an attitude which is inconsistent with the alliance or will create difficulties for the other Party thereto. In pursuance of this undertaking they will not oppose each other's policy in foreign countries, nor conclude with a third Power any agreement of a political character which might be prejudicial to the interests of the other Party.

6. His Britannic Majesty recognizes that the responsibility for the lives and property of foreigners in Egypt devolves henceforth upon the Egyptian Government. His Majesty the King of Egypt will ensure the fulfilment of his obligations in this respect.

7. Should, notwithstanding the provisions of paragraph 4 above, either of the High Contracting Parties become engaged in war, the other High Contracting Party will, subject always to the provisions of paragraph 14 below, immediately come to his aid in the capacity of an ally. In particular, His Majesty the King of Egypt will, in the event of war or menace of war, furnish to His Britannic Majesty on Egyptian territory all the facilities and assistance in his power, including the use of his ports, aerodromes and means of communication.

8. In view of the desirability of identity in training and methods between the Egyptian and British Armies, His Majesty the King of Egypt undertakes that, should he deem it necessary to have recourse to foreign military instructors, these shall be chosen from amongst British subjects.

9. In order to facilitate and secure to His Britannic Majesty the protection of the Suez Canal as an essential means of communication between the different parts of the British Empire, His Majesty the King of Egypt authorizes His Britannic Majesty to maintain upon Egyptian territory in localities to be agreed upon, to the east of Longitude 32° E., such forces as His Britannic Majesty considers necessary for this purpose. The presence of these forces shall not constitute in any manner an occupation and will in no way prejudice the sovereign rights of Egypt.

10. In view of the friendship between the two countries and of the alliance contemplated in the present proposals, the Egyptian Government when engaging the services of foreign officials will as a rule engage British subjects.

11. His Britannic Majesty recognizes that the capitulatory régime now existing in Egypt is no longer in accordance with the spirit of the times and with the present state of Egypt.

His Britannic Majesty accordingly undertakes to use all his influence with the Powers possessing capitulatory rights in Egypt to obtain, in conditions which will safeguard the legitimate interests of foreigners, the transfer to the Mixed Tribunals of the jurisdiction of the existing Consular Courts, and the application of Egyptian legislation to foreigners.

12. In view of the friendship between the High Contracting Parties and of the alliance contemplated in the present proposals, His Britannic Majesty will be represented at the Court of His Majesty the King of Egypt by an Ambassador, duly accredited, and His Majesty the King of Egypt will reserve the highest

diplomatic rank at his Court to the representative of His Britannic Majesty.

His Majesty the King of Egypt will be represented at the Court of St. James's by an Ambassador.

13. While reserving liberty to conclude new conventions in future modifying the conventions of 1899, the High Contracting Parties agree that the status of the Sudan shall be that resulting from the said conventions. Accordingly, the Governor-General shall continue to exercise on the joint behalf of the High Contracting Parties the powers conferred upon him by the said conventions.

14. Nothing in the present proposals is intended to or shall in any way prejudice the rights and obligations which devolve, or may devolve, upon either of the High Contracting Parties under the Covenant of the League of Nations or the Treaty for the Renunciation of War signed at Paris on 27th August, 1928.

15. The High Contracting Parties agree that any difference on the subject of the application or the interpretation of the provisions of the present proposals which they are unable to settle by direct negotiation shall be dealt with in accordance with the provisions of the Covenant of the League of Nations.

16. At any time after the expiration of a period of twenty-five years from the coming into force of a treaty based on the above proposals such modification of its terms as may be deemed appropriate in the circumstances as they then exist may be made by agreement between the High Contracting Parties.

ARMY : DRAFT BRITISH NOTE.

Your Excellency,

In the course of our recent discussions, certain military questions arose and were most carefully considered. These questions fall naturally into two categories—first, those concerning the Egyptian forces which might, in the unhappy event of the circumstances arising contemplated in the first sentence of paragraph 7 of the proposals, be called upon to co-operate actively with allied British forces; and, secondly, questions touching the British forces which, under paragraph 9, will be stationed in the neighbourhood of the Suez Canal for the purpose of ensuring the defence of that vital artery of British imperial communications.

As to the first category, your Excellency and I agreed as follows :—

- (1) Existing arrangements, under which the Inspector-General and his staff exercise certain functions, shall terminate. British personnel shall be withdrawn from the Egyptian forces.

- (2) The Egyptian Government, however, desire in accordance with paragraph 8 of the proposals to avail themselves of the advice of a British military mission. His Britannic Majesty's Government in the United Kingdom and Northern Ireland undertake to furnish such a mission. The Egyptian Government will send the personnel of the Egyptian forces to be trained abroad in Great Britain only. His Majesty's Government, for their part, undertake to receive any personnel which the Egyptian Government may send to Great Britain for this purpose.
- (3) In the interests of the close co-operation referred to above, the armament and equipment of the Egyptian forces shall not differ in type from those of the British forces. His Majesty's Government undertake to use their good offices to facilitate the supply of such armament and equipment from Great Britain whenever the Egyptian Government so desire.

With regard to the British forces referred to in paragraph 9 of the proposals :—

- (i) The Egyptian Government will provide, free of cost to His Majesty's Government, lands, barracks, etc., in localities to be agreed upon, equivalent to those now occupied by the British forces in Egypt. Upon the completion of this new accommodation, those forces shall be transferred thereto, handing over the lands, barracks, etc. thus vacated to the Egyptian Government. In view of the technical objections to effecting this transfer piecemeal it shall await the completion of the new accommodation to be provided. Having regard to the character of the region lying to the east of Longitude 32° E., steps will be taken to furnish reasonable amenities by planting trees, gardens, etc., for the troops, who will also be provided with an adequate emergency fresh water supply.
- (ii) Subject to any modifications which may in the future be made by agreement between the two governments, the privileges and immunities in jurisdictional and fiscal matters at present enjoyed by the British forces in Egypt will continue.
- (iii) Unless the two governments agree to the contrary, the Egyptian Government will prohibit the passage of aircraft over the territories situated on either side of the Suez Canal and within 20 kilometres of it. This prohibition will not, however, apply to the forces of the two governments or to services maintained by genuinely British or Egyptian organizations operating under the authority of the Egyptian Government.

We also agreed that the Egyptian Government will give all necessary facilities to British military aircraft, personnel and stores on passage to or from the aerodromes placed at the disposal of the British forces in accordance with paragraph 9 of the proposals. His Majesty's Government will give appropriate facilities to Egyptian military aircraft, personnel and stores in territory under their control.

ARMY : DRAFT EGYPTIAN NOTE.

Sir,

I have the honour to acknowledge the receipt of your note of to-day's date dealing with certain military questions, and to confirm that it accurately represents the agreement at which we have arrived.

ADVISERS : DRAFT EGYPTIAN NOTE.

Sir,

As you are aware, the Egyptian Government have taken in hand an extensive programme of internal reform, and I realize that this task will become even more far-reaching and difficult in view of the important modifications in the capitulatory system contemplated by the proposals. I appreciate that, in order to secure the satisfactory completion of this programme of reform the best advice procurable will be required, and I take this opportunity of informing you that it is the intention of the Egyptian Government to maintain, during the period necessary for the completion of the reforms in question, the employment of British subjects in the posts of Financial Adviser to the Egyptian Government and Judicial Adviser to the Ministry of Justice. Future occupants of these posts will be selected by the Egyptian Government in agreement with His Britannic Majesty's Government in the United Kingdom, and will receive their appointments as Egyptian officials from the Egyptian Government.

ADVISERS : DRAFT BRITISH NOTE.

Your Excellency,

I have the honour to acknowledge the receipt of your note of to-day's date regarding the posts of the Financial Adviser to the Egyptian Government and the Judicial Adviser to the Ministry of Justice, and note with satisfaction your Excellency's statement of the intentions of the Egyptian Government.

POLICE : DRAFT EGYPTIAN NOTE.

Sir,

I take this opportunity of informing you that the Egyptian Government intend to abolish the European Bureau of the Public Security Department, but, in pursuance of the undertaking

contained in paragraph 6 of the proposals, the Egyptian Government will retain, for at least five years from the coming into force of a treaty based on the proposals, a certain European element in their city police, which will remain for the same period under the command of British officers.

If at some future date the Egyptian Government should desire to reorganize their police force, I shall be glad to know whether they can rely upon the assistance of His Britannic Majesty's Government in this task.

POLICE : DRAFT BRITISH NOTE.

Your Excellency,

His Britannic Majesty's Government in the United Kingdom note with satisfaction that in pursuance of the undertaking contained in paragraph 6 of the proposals the Egyptian Government, after the disappearance of the European Bureau of the Public Security Department, will retain, for at least five years from the coming into force of a treaty based on the proposals, a certain European element in their city police, which will remain for the same period under the command of British officers.

If at some future date the Egyptian Government should desire to reorganize their police force, His Britannic Majesty's Government will be happy to lend them the services of individual experts or of a police mission as they have done in the case of other countries similarly desirous of reorganizing their police.

CAPITULATIONS : DRAFT BRITISH NOTE.

Your Excellency,

Paragraph 11 of the proposals provides as follows :—

“ His Britannic Majesty recognizes that the capitulatory régime now existing in Egypt is no longer in accordance with the spirit of the times and with the present state of Egypt.

“ His Britannic Majesty accordingly undertakes to use all his influence with the Powers possessing capitulatory rights in Egypt to obtain, in conditions which will safeguard the legitimate interests of foreigners, the transfer to the Mixed Tribunals of the jurisdiction of the existing Consular Courts, and the application of Egyptian legislation to foreigners.”

It will be useful if I explain to your Excellency the lines on which I think this reform of the capitulatory régime might well proceed, as I shall be prepared to support the efforts of the Egyptian Government to conclude arrangements with the Powers on these lines when a treaty based on the proposals comes into force.

It was hoped in 1920, when negotiations were in progress between the British and Egyptian Governments, that arrangements might be made for the closing by foreign Powers of their

Consular Courts in Egypt. Draft laws were accordingly prepared in that year extending the existing jurisdiction of the Mixed Tribunals, and enabling them to exercise all the jurisdiction now exercised by the Consular Courts.

I shall be prepared to agree to the utilization of those draft laws as the basis of the reform of the capitulatory régime if foreign Powers are willing to transfer to the Mixed Tribunals the jurisdiction of their Consular Courts.

On points of detail many changes will no doubt be required. These must be discussed by experts. There are, however, certain modifications which will, I think, be necessary in any event, and which I desire to take this opportunity of pointing out to your Excellency.

It may be difficult for some Powers to agree to the transfer to the Mixed Tribunals of all suits relating to the "statut personnel" of their nationals. Transfer in the case of these questions should be facultative. Jurisdiction in such matters should remain with the consular authorities unless an agreement is made between the Egyptian Government and the foreign government concerned for its transfer to the Mixed Tribunals. I anticipate agreement that the Mixed Tribunals should exercise jurisdiction in these matters in cases where British subjects are concerned.

In the case of pardons or remissions of sentences imposed on foreigners, and also in connection with the execution of capital sentences imposed on foreigners, the Minister of Justice will consult the Judicial Adviser, so long as that official is retained, before tendering his advice to the King.

I recognize that the conditions in which the capitulations are at present applied as regards the power of the Egyptian Government to legislate for or to impose taxation on foreigners are no longer consistent with modern conditions. I should be prepared to agree that in future any assent which is necessary before Egyptian legislation, including fiscal legislation, is applied to foreigners shall be given by the General Assembly of the Mixed Tribunals, except in the case of legislation relating to the constitution or jurisdiction of the Mixed Tribunals themselves, which should not come into force until it has been approved by the Powers. It should be the duty of the General Assembly of the Mixed Tribunals to satisfy itself that the legislation in question is not inconsistent with the principles generally adopted in modern legislation which is applicable to foreigners, and, with particular relation to legislation of a fiscal character, that it does not inequitably discriminate against foreigners, including foreign companies.

An extension of the criminal jurisdiction of the Mixed Tribunals will necessitate the preparation and promulgation of a new code of criminal procedure. The draft laws prepared in 1920 contain certain provisions of importance on this subject of criminal

procedure (Articles 10-27 of Law II, draft of April 18th, 1920), and your Excellency will no doubt agree that the new criminal code should not diverge from the principles laid down in these articles.

There are certain matters as to which it will be necessary for agreement to be reached between the Egyptian Government and His Britannic Majesty's Government in the United Kingdom, but I do not think it necessary to do more at the moment than mention these subjects.

The first is the definition of the word "foreigner" for the purpose of the proposed extension of the jurisdiction of the Mixed Tribunals. I understand from your Excellency that the codes now enforced by the Native Courts in Egypt subject to the Native Courts all persons in Egypt other than those who by law, usage or treaty are withdrawn from their jurisdiction. I am content to accept this principle, provided that it is understood that all foreigners who have enjoyed the benefit of the capitulatory régime in the past will fall under the jurisdiction of the Mixed Tribunals irrespective of changes of sovereignty effected after the war of 1914-18.

The second is the increase in the personnel of the Mixed Tribunals which will be necessitated by the proposed extension of their jurisdiction, and, as part of this question, the new functions of the Procureur Général of the Mixed Tribunals and the staff which will be necessary to enable him to discharge those functions satisfactorily. The Judicial Adviser will, so long as that official is retained, be consulted with regard to the appointment of foreign judges in the Mixed Tribunals and of foreign members of the parquet, if any.

CAPITULATIONS : DRAFT EGYPTIAN NOTE.

Sir,

I have the honour to acknowledge the receipt of your note of to-day's date, in which you informed me of the lines upon which His Majesty's Government in the United Kingdom consider that the reform of the capitulatory régime might well proceed, and drew my attention to certain particular considerations to which you attach importance.

I am happy to state that the particular proposals to which you referred are in accordance with the intentions of the Egyptian Government, who are also in general agreement with His Britannic Majesty's Government as to the lines on which the reform of the capitulatory system should proceed.

As regards the definition of the word "foreigner," I would observe that, while the Egyptian Government would have no objection to the civil and criminal jurisdiction of the Mixed

Tribunals including foreigners who possessed capitulatory privileges before the war of 1914-18, those foreigners who do not possess and never have possessed those privileges must evidently be subject to the jurisdiction of the Native Courts.

FOREIGN OFFICIALS : DRAFT EGYPTIAN NOTE.

Sir,

In the course of our conversations in regard to paragraph 10 of the proposals, it was understood that His Britannic Majesty's Government in the United Kingdom and Northern Ireland will not press for an unreasonably narrow interpretation of this paragraph, and that nothing therein contained shall prejudice the freedom of the Egyptian Government to engage non-British foreign officials for posts for which suitable British subjects are not available.

FOREIGN OFFICIALS : DRAFT BRITISH NOTE.

Your Excellency,

I have the honour to acknowledge the receipt of your note of to-day's date regarding the engagement of foreign officials and to confirm the statement therein recorded of the understanding which we have reached.

MINORITIES : DRAFT BRITISH NOTE.

Your Excellency,

I wish to place it on record that it was not thought necessary to mention, in the proposals, the question of the protection of minorities, which figured in the declaration of February 28th, 1922, but that it is recognized that this question will in future be the exclusive concern of the Egyptian Government.

MINORITIES : DRAFT EGYPTIAN NOTE.

Sir,

I have the honour to take note of your communication of to-day's date respecting minorities in Egypt.

SUDAN DEBT : DRAFT BRITISH NOTE.

Your Excellency,

When discussing paragraph 13 of the proposals, we agreed that the question of the indebtedness of the Sudan to Egypt should now be examined with a view to a settlement on fair and equitable lines.

We further agreed that a representative of the British Treasury should discuss the question with a representative of the Egyptian Ministry of Finance as soon as a treaty based on the proposals comes into force.

SUDAN DEBT : DRAFT EGYPTIAN NOTE.

Sir,

In reply to your note of to-day's date, I have the honour to confirm our agreement that the question of the indebtedness of the Sudan to Egypt should be examined by representatives of the British Treasury and of the Egyptian Ministry of Finance with a view to its settlement on fair and equitable lines.

SUDAN. ACCESSION TO INTERNATIONAL CONVENTIONS :

DRAFT BRITISH NOTE.

Your Excellency,

It will be convenient to place on record the agreement which we have reached as regards the method by which international conventions are to be made applicable to the Sudan. The conventions which it will be desired to apply to the Sudan will naturally be conventions of a technical or humanitarian character.

In cases where such a convention is signed on behalf of both Egypt and Great Britain, and it is desired that the convention should be applied to the Sudan, the British and Egyptian delegates will, at a convenient moment, make a joint declaration, to be duly placed on record, to the effect that their signatures on behalf of Egypt and the United Kingdom respectively are intended, taken together, to cover the Sudan, and (in cases where the convention requires ratification) that, when the ratifications of both the King of Egypt and His Britannic Majesty have been deposited, the convention will become applicable to the Sudan in accordance with its terms. If no such declaration is made, the convention will not become applicable to the Sudan, unless by the method of accession, to which reference is made later.

In cases where such a declaration has been made, no special mention would be made of the Sudan in the instruments of ratification.

In some cases, where the convention provides for subsequent accession, and it may be convenient that the convention should be applied to the Sudan by this method, accession would be effected by a joint instrument, signed on behalf of Egypt and Great Britain respectively by two persons duly appointed for the purpose. The method of depositing the instrument of accession would be the subject of agreement in each case between the two governments. In such cases no question of ratification arises.

At international conferences where such conventions are negotiated the Egyptian and British delegates would naturally keep in touch with a view to any action which they may agree to be desirable in the interests of the Sudan.

SUDAN. ACCESSION TO INTERNATIONAL CONVENTIONS :
DRAFT EGYPTIAN NOTE.

Sir,

I have the honour to acknowledge the receipt of your note of to-day's date regarding the method of application to the Sudan of international conventions which it may be desired should apply to that country. I beg to confirm the statement therein recorded of the understanding which we have reached.

SUDAN. RETURN OF AN EGYPTIAN BATTALION :
DRAFT BRITISH NOTE.

Your Excellency,

During our recent discussions your Excellency expressed the hope that, on the coming into force of a treaty, Egyptian troops would be re-admitted to the Sudan.

If, as His Majesty's Government in Great Britain and Northern Ireland earnestly trust, the treaty is worked in the same friendly spirit in which the proposals were negotiated, they will be prepared to examine sympathetically a proposal for the return to the Sudan of an Egyptian battalion simultaneously with the withdrawal of the British forces from Cairo.

SUDAN. RETURN OF AN EGYPTIAN BATTALION :
DRAFT EGYPTIAN NOTE.

Sir,

I have the honour to acknowledge the receipt of your note of to-day's date, relative to the return of an Egyptian battalion to the Sudan, and to take note of the attitude of His Britannic Majesty's Government in the matter.

No. 3. Draft of the Proposed Anglo-Egyptian Treaty* and Exchange of Notes as handed to the Egyptian Delegation on April 17, 1930.

His Majesty the King of Great Britain, Ireland and the British Dominions beyond the Seas, Emperor of India, and His Majesty the King of Egypt,

Being anxious to consolidate the friendship and perpetuate the relations of good understanding between them and to co-operate in the execution of their international obligations in preserving the peace of the world,

And considering that these objects will best be achieved by the conclusion of a treaty of friendship and alliance, which in their common interest will provide for effective co-operation in preserving peace and ensuring the defence of their respective territories, and shall govern their mutual relations in the future,

* Only the first seven articles were passed by the Drafting Committee. The numbering of all articles is provisional and for purpose of reference.

Have agreed to conclude a treaty for this purpose, and have appointed as their plenipotentiaries :—

His Majesty the King of Great Britain, Ireland, and the British Dominions beyond the Seas, Emperor of India :

for Great Britain and Northern Ireland :

His Majesty the King of Egypt :

who, having communicated their full powers, found in good and due form, have agreed as follows :—

Article 1.

The military occupation of Egypt by the forces of His Britannic Majesty is terminated.

Article 2.

An alliance is established between the High Contracting Parties with a view to consolidating their friendship, their cordial understanding and their good relations.

Article 3.

As Egypt intends to apply for membership of the League of Nations, His Britannic Majesty recognizes her right as a sovereign independent State to become a member of the League on complying with the provisions of the Covenant of the League.

Article 4.

Each of the High Contracting Parties undertakes not to adopt in foreign countries an attitude which is inconsistent with the alliance, or to conclude political treaties inconsistent with the provisions of the present treaty.

Article 5.

Should a dispute with a third State arise which, in the terms of Article 12 of the Covenant of the League of Nations, is likely to lead to a rupture with that State, the High Contracting Parties will consult each other with a view to the settlement of the said dispute by peaceful means, in accordance with the provisions of the Covenant, and of any other international obligations which may be applicable to the case.

Article 6.

His Britannic Majesty recognizes that the responsibility for the lives and property of foreigners in Egypt devolves exclusively upon the Egyptian Government, who will ensure the fulfilment of their obligations in this respect.

Article 7.

Should, notwithstanding the provisions of Article 5 above, either of the High Contracting Parties become engaged in war, the other High Contracting Party will, subject always to the provisions of Article 12 below, immediately come to his aid in the capacity of an ally. The aid of His Majesty the King of Egypt, in the event of war, or imminent menace of war, will consist in furnishing to His Britannic Majesty, on Egyptian territory, in accordance with the Egyptian system of administration and legislation, all the facilities and assistance in his power, including the use of his ports, aerodromes and means of communication. It will accordingly be for the Egyptian Government to take all the administrative and legislative measures necessary to render these facilities and assistance effective.

Article 8.

In view of the fact that the Suez Canal, while being an integral part of Egypt, is a universal means of communication as also an essential means of communication between the different parts of the British Empire, His Majesty the King of Egypt, until such time as the High Contracting Parties agree that the Egyptian forces are in a position to ensure by their own resources the liberty and entire security of navigation of the Canal, authorizes His Britannic Majesty to station in the neighbourhood of Ismailia and in the area to the west of Ismailia as far as Mahsama railway station such forces as His Britannic Majesty considers necessary to ensure in co-operation with the Egyptian forces the defence of the Canal; for the same purpose the Royal Air Force depot will be transferred from Abukir to Port Fuad. The British forces will have access to the desert areas on either side of the Canal for purposes of training and manœuvre. The presence of these forces shall not constitute in any manner an occupation, and will in no way prejudice the sovereign rights of Egypt.

It is understood that, at the end of the period of twenty years specified in Article 14, the question whether the presence of British forces is no longer necessary owing to the fact that the Egyptian forces are in a position to ensure by their own resources the liberty and entire security of navigation on the Canal may, if there is any difference between the High Contracting Parties, be submitted for settlement in accordance with the provisions of the Covenant of the League of Nations.

Article 9.

His Britannic Majesty recognizes that the capitulatory régime now existing in Egypt is no longer in accordance with the spirit of the times and with the present state of Egypt.

His Britannic Majesty accordingly undertakes to use all his influence with the Powers possessing capitulatory rights in Egypt to obtain, in conditions which will safeguard the legitimate interests of foreigners, the transfer to the Mixed Tribunals of the jurisdiction of the existing Consular Courts, and the application of Egyptian legislation to foreigners.

Article 10.

In view of the friendship between the High Contracting Parties and of the alliance contemplated in the present proposals, His Britannic Majesty will be represented at the Court of His Majesty the King of Egypt by an Ambassador duly accredited.

His Majesty the King of Egypt will be represented at the Court of St. James's by an Ambassador.

Article 11.

While reserving liberty to conclude new conventions in future modifying the conventions of 1899, the High Contracting Parties agree that without prejudice to Egypt's rights and material interests that the status of the Sudan shall be that resulting from the said conventions. Accordingly, the Governor-General shall continue to exercise on the joint behalf of the High Contracting Parties the powers conferred upon him by the said conventions.

Article 12.

Nothing in the present proposals is intended to or shall in any way prejudice the rights and obligations which devolve, or may devolve, upon either of the High Contracting Parties under the Covenant of the League of Nations or the Treaty for the Renunciation of War signed at Paris on August 27th, 1928.

Article 13.

The High Contracting Parties agree that any difference on the subject of the application or the interpretation of the provisions of the present treaty which they are unable to settle by direct negotiation shall be dealt with in accordance with the provisions of the Covenant of the League of Nations.

Article 14.

At any time after the expiration of a period of twenty years from the coming into force of the treaty, the High Contracting Parties will, at the request of either of them, enter into negotiations with a view to such revision by agreement between them of its terms as may be appropriate in the circumstances as they then exist. In case of disagreement, the difference will be dealt with in accordance with the provisions of the Covenant of the League of Nations.

Nevertheless, at any time after the expiration of a period of ten years from the coming into force of the treaty, negotiations may be entered into with the consent of both the High Contracting Parties with a view to such revision as aforesaid.

Article 15.

Without prejudice to the provisions of Article 13, the High Contracting Parties agree, if either of them should so request, to enter into friendly discussions within one year from the coming into force of the treaty with regard to any question arising out of the application of any article of the present treaty with respect to which any difficulty may have arisen.

Article 16.

The present treaty is subject to ratification. Ratification shall be exchanged in Cairo as soon as possible. The treaty shall come into force on the date of the exchange of ratifications.

In faith whereof, etc.,

DRAFT EXCHANGE OF NOTES.

Sir,

I wish to place on record the understandings which have been reached between us in regard to various important matters arising out of or in connection with the treaty which we have signed to-day.

In regard to matters of a military character we are agreed as follows :—

(1) British personnel shall be withdrawn from the Egyptian army and the functions of the Inspector-General and his staff shall terminate.

(2) The Egyptian Government, desiring to perfect the training of the Egyptian army and intending, as a natural consequence of the alliance which has been established, that such foreign instructors as they may deem necessary shall be chosen from amongst British subjects only, will avail themselves of the advice of a British military mission. His Majesty's Government in the United Kingdom will furnish the military mission which the Egyptian Government desire and will also undertake to receive, and provide training in the United Kingdom for, any personnel of the Egyptian forces which the Egyptian Government may desire to send for the purpose of being trained. In the circumstances created by this treaty the Egyptian Government will naturally not desire to send any personnel of their armed forces to be trained abroad elsewhere than in the United Kingdom.

(3) In the interests of the alliance and in view of the possible necessity of active co-operation between the British and Egyptian forces, the armament and equipment of the Egyptian forces shall not differ in type from those of the British forces. His Majesty's Government in the United Kingdom undertake to use their good offices to facilitate the supply of such armament and equipment from the United Kingdom whenever the Egyptian Government so desire.

(4) With reference to Article 8 of the treaty, it is understood that, if, after a survey of the ground in the neighbourhood of Ismailia, the two Governments are not agreed that there is a sufficient area of hard desert, west of the Canal and in the immediate vicinity of Ismailia or westwards between Ismailia and Mahsama railway station, to provide adequate accommodation and training grounds for 8,000 men of the land forces, the Egyptian Government will provide at some place to be agreed upon situated south of Ismailia and west of the Canal a further area of land adequate and suitable for the accommodation and training of 2,500 men of the land forces.

(5) The Egyptian Government will accord, and provide where necessary, all reasonable means of communication and access to and from the localities where the British troops are situated and will also accord facilities at Port Said and Suez for the landing and storage of British military material and supplies.

(6) The Egyptian Government will provide for the British troops, 8,000 of the land forces and 3,000 of the Air Force, less the number for which accommodation already exists in these localities, free of cost to the Government of the United Kingdom, in the localities agreed upon in accordance with Article 8 of the treaty and paragraph (4) above, the lands and permanent accommodation, including an emergency water supply, suitable according to modern generally recognized standards and satisfactory to His Majesty's Government. In addition to providing the accommodation above mentioned, the Egyptian Government will take steps, having regard to the character of the localities where British troops will be stationed, to furnish reasonable amenities by planting trees, gardens, etc., for the troops. They will also provide a convalescent camp on the Mediterranean coast.

When such accommodation is fully completed the British forces then present in other parts of Egypt will withdraw therefrom and will hand over to the Egyptian Government all land and buildings so vacated, other than those in private ownership.

(7) Subject to any modifications which the two Governments may agree to introduce in the future, the immunities and privileges in jurisdictional and fiscal matters, including freedom from

taxation, at present enjoyed by the British forces in Egypt will continue to be extended to all the armed forces of His Britannic Majesty in that country. The Egyptian Government will take the necessary steps to ensure that the altered conditions after the transfer of the British troops to the localities mentioned above will not render their position as regards immunities and privileges in any way less favourable than that which they at present enjoy in Egypt.

(8) Unless the governments agree to the contrary, the Egyptian Government will prohibit the passage of aircraft over the territories situated on either side of the Suez Canal and within 20 kilometres of it. This prohibition will not, however, apply to the forces of the two governments or to services maintained by genuinely British or Egyptian organizations, operating under the authority of the Egyptian Government.

(9) The Egyptian Government will give all necessary facilities to British aircraft, personnel and stores on passage to and from the aerodromes placed at the disposal of the British forces in accordance with Article 8 of the treaty and for the purpose of such passage will secure the maintenance and availability at all times of such aerodromes and landing grounds in Egyptian territory as are required. Visits by representatives of the British Air Force for the purpose of ascertaining the condition of such aerodromes and laying the necessary fuel dumps shall be permitted. His Majesty's Government will give reciprocal facilities in their aerodromes in the Canal zone to Egyptian military aircraft, personnel and stores on passage to and from Egyptian aerodromes.

In regard to other matters :—

(10) The Egyptian Government intend to abolish the European Bureau of the Public Security Department, but will retain for five years from the coming into force of the treaty a certain European element in their city police which will remain for the same period under the command of British officers.

With a view to facilitating the gradual substitution of Egyptian officials for the said European element and thereby securing the harmonious working of the police organizations, the Egyptian Government propose to dispense annually with the services of one-fifth of the number of European police officials. The Egyptian Government intend, however, to employ for the whole period British police commandants at the head of such European element.

(11) The Egyptian Government are anxious to have expert assistance for the extensive programme of internal reforms which they contemplate. They intend to maintain for the remaining period of their existing contracts the Financial Adviser to the Egyptian Government and Judicial Adviser to the Ministry of

Justice. The occupants of these posts hold their appointments as Egyptian officials from the Egyptian Government.

(12) The Egyptian Government, in view of the treaty of friendship and alliance signed to-day, will naturally, when engaging the services of foreign experts, as a rule give preference to British subjects possessing the necessary qualifications.

(13) The two governments agree that the question of the indebtedness of the Sudan to Egypt shall now be examined with a view to settlement on fair and equitable lines and that for this purpose a representative of the Treasury of the United Kingdom and of the Egyptian Ministry of Finance should discuss the question as soon as the treaty comes into force.

(14) The two governments are agreed that there shall be no discrimination in the Sudan between British subjects and Egyptian nationals in matters of commerce and immigration or the possession of property. It has further been agreed that, if the treaty is worked in the same friendly spirit in which it has been negotiated, His Majesty's Government in the United Kingdom will be prepared to examine sympathetically a proposal for the return to the Sudan of an Egyptian battalion simultaneously with the withdrawal of the British forces from Cairo.

(15) As regards the method by which international conventions are to be made applicable to the Sudan, the two governments are agreed as follows :—

The conventions which it will be desired to apply to the Sudan will naturally be conventions of a technical or humanitarian character.

In cases where such a convention is signed on behalf of both Egypt and the United Kingdom, and it is desired that the convention should be applied to the Sudan, the British and Egyptian delegates will at a convenient moment make a joint declaration, to be duly placed on record, to the effect that their signatures on behalf of Egypt and the United Kingdom respectively are intended, taken together, to cover the Sudan, and (in cases where the convention requires ratification) that, when the ratifications of both the King of Egypt and His Britannic Majesty have been deposited, the convention will become applicable to the Sudan in accordance with its terms. If no such declaration is made the convention will not become applicable to the Sudan, unless by the method of accession, to which reference is made later.

In cases where such a declaration has been made, no special mention would be made of the Sudan in the instruments of ratification.

In some cases, where the convention provides for subsequent accession, and it may be convenient that the convention should be

applied to the Sudan by this method, accession would be effected by a joint instrument signed on behalf of Egypt and the United Kingdom respectively by two persons duly appointed for the purpose. The method of depositing the instrument of accession would be the subject of agreement in each case between the two governments. In such cases no question of ratification arises.

At international conferences where such conventions are negotiated the Egyptian and British delegates would naturally keep in touch with a view to any action which they may agree to be desirable in the interests of the Sudan.

(16) With regard to Article 10 of the treaty the Egyptian Government, anxious to mark the satisfaction which the appointment of a British representative as the first Ambassador in Egypt affords them, intend that his precedence in relation to the representatives of other Powers shall extend to his successors.

(17) With regard to Article 9 of the treaty the two Governments agree that immediately the treaty comes into force they will determine in consultation the lines on which, in their opinion, the reform of the capitulatory régime should proceed and on which His Majesty's Government in the United Kingdom should support the Egyptian Government in their efforts to conclude appropriate arrangements with the capitulatory Powers.

Sir,

In reply to your note of to-day's date, I have the honour to confirm the record contained in your note of the understandings which have been reached between us with regard to matters arising out of or in connection with the treaty which has been signed to-day.

(C.M.D. 3575. 1930.)

APPENDIX B.

TREATY OF ALLIANCE BETWEEN THE UNITED KINGDOM AND 'IRAQ.

(This Treaty has not been ratified by His Majesty.)

His Majesty the King of Great Britain, Ireland and the British Dominions beyond the Seas, Emperor of India,

And His Majesty the King of 'Iraq,

Whereas they desire to consolidate the friendship and to maintain and perpetuate the relations of good understanding between their respective countries ; and

Whereas His Britannic Majesty undertook in the Treaty of Alliance signed at Baghdad on the thirteenth day of January, One thousand nine hundred and twenty-six of the Christian Era, corresponding to the twenty-eighth day of Jamadi-al-Ukhra, One thousand three hundred and forty-four, Hijrah, that he would take into active consideration at successive intervals of four years the question whether it was possible for him to press for the admission of 'Iraq into the League of Nations ; and Whereas His Majesty's Government in the United Kingdom of Great Britain and Northern Ireland informed the 'Iraq Government without qualification or proviso on the fourteenth day of September, One thousand nine hundred and twenty-nine that they were prepared to support the candidature of 'Iraq for admission to the League of Nations in the year One thousand nine hundred and thirty-two and announced to the Council of the League on the fourth day of December, One thousand nine hundred and twenty-nine, that this was their intention ; and

Whereas the mandatory responsibilities accepted by His Britannic Majesty in respect of 'Iraq will automatically terminate upon the admission of 'Iraq to the League of Nations ; and

Whereas His Britannic Majesty and His Majesty the King of 'Iraq consider that the relations which will subsist between them as independent sovereigns should be defined by the conclusion of a Treaty of Alliance and Amity ;

Have agreed to conclude a new treaty for this purpose on terms of complete freedom, equality and independence which will become operative upon the entry of 'Iraq into the League of Nations, and have appointed as their plenipotentiaries :

His Majesty the King of Great Britain, Ireland and the British Dominions beyond the Seas, Emperor of India,

For Great Britain and Northern Ireland :

Lieutenant-Colonel Sir Francis Henry Humphrys, Knight Grand Cross of the Royal Victorian Order, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Knight Commander of the Most Excellent Order of the British Empire, Companion of the Most Eminent Order of the Indian Empire, High Commissioner of His Britannic Majesty in 'Iraq; and

His Majesty the King of 'Iraq :

General Nuri Pasha al Sa'id, Order of the Nadha, Second Class, Order of the Istiqlal, Second Class, Companion of the Most Distinguished Order of Saint Michael and Saint George, Companion of the Distinguished Service Order, Prime Minister of the 'Iraq Government and Minister for Foreign Affairs ;

who having communicated their full powers, found in due form, have agreed as follows :—

Article 1.

There shall be perpetual peace and friendship between His Britannic Majesty and His Majesty the King of 'Iraq.

There shall be established between the High Contracting Parties a close alliance in consecration of their friendship, their cordial understanding and their good relations, and there shall be full and frank consultation between them in all matters of foreign policy which may affect their common interests.

Each of the High Contracting Parties undertakes not to adopt in foreign countries an attitude which is inconsistent with the alliance or might create difficulties for the other party thereto.

Article 2.

Each High Contracting Party will be represented at the Court of the other High Contracting Party by a diplomatic representative duly accredited.

Article 3.

Should any dispute between 'Iraq and a third State produce a situation which involves the risk of a rupture with that State, the High Contracting Parties will concert together with a view to the settlement of the said dispute by peaceful means in accordance with the provisions of the Covenant of the League of Nations and of any other international obligations which may be applicable to the case.

Article 4.

Should, notwithstanding the provisions of Article 3 above, either of the High Contracting Parties become engaged in war, the other High Contracting Party will, subject always to the provisions of Article 9 below, immediately come to his aid in the

capacity of an ally. In the event of an imminent menace of war the High Contracting Parties will immediately concert together the necessary measures of defence. The aid of His Majesty the King of 'Iraq in the event of war or the imminent menace of war will consist in furnishing to His Britannic Majesty on 'Iraq territory all facilities and assistance in his power, including the use of railways, rivers, ports, aerodromes and means of communication.

Article 5.

It is understood between the High Contracting Parties that responsibility for the maintenance of internal order in 'Iraq and, subject to the provisions of Article 4 above, for the defence of 'Iraq from external aggression rests with His Majesty the King of 'Iraq. Nevertheless, His Majesty the King of 'Iraq recognizes that the permanent maintenance and protection in all circumstances of the essential communications of His Britannic Majesty is in the common interest of the High Contracting Parties. For this purpose and in order to facilitate the discharge of the obligations of His Britannic Majesty under Article 4 above, His Majesty the King of 'Iraq undertakes to grant to His Britannic Majesty for the duration of the alliance sites for air bases to be selected by His Britannic Majesty at or in the vicinity of Basra and for an air base to be selected by His Britannic Majesty to the west of the Euphrates. His Majesty the King of 'Iraq further authorizes His Britannic Majesty to maintain forces upon 'Iraq territory at the above localities in accordance with the provisions of the annexure of this treaty on the understanding that the presence of those forces shall not constitute in any manner an occupation and will in no way prejudice the sovereign rights of 'Iraq.

Article 6.

The annexure hereto shall be regarded as an integral part of the present treaty.

Article 7.

This treaty shall replace the treaties of alliance signed at Baghdad on the tenth day of October, One thousand nine hundred and twenty-two of the Christian Era, corresponding to the nineteenth day of Safar, One thousand three hundred and forty-one, Hijrah, and on the thirteenth day of January, One thousand nine hundred and twenty-six, of the Christian Era, corresponding to the twenty-eighth day of Jamadi-al-Ukhra, One thousand three hundred and forty-four, Hijrah, and the subsidiary agreements thereto, which shall cease to have effect upon the entry into force of this treaty. It shall be executed in duplicate, in the English and Arabic languages, of which the former shall be regarded as the authoritative version.

Article 8.

The High Contracting Parties recognize that, upon the entry into force of this treaty, all responsibilities devolving under the treaties and agreements referred to in Article 7 hereof upon His Britannic Majesty in respect of 'Iraq will, in so far as His Britannic Majesty is concerned, then automatically and completely come to an end, and that such responsibilities, in so far as they continue at all, will devolve upon His Majesty the King of 'Iraq alone.

It is also recognized that all responsibilities devolving upon His Britannic Majesty in respect of 'Iraq under any other international instrument, in so far as they continue at all, should similarly devolve upon His Majesty the King of 'Iraq alone, and the High Contracting Parties shall immediately take such steps as may be necessary to secure the transference to His Majesty the King of 'Iraq of these responsibilities.

Article 9.

Nothing in the present treaty is intended to or shall in any way prejudice the rights and obligations which devolve, or may devolve, upon either of the High Contracting Parties under the Covenant of the League of Nations or the Treaty for the Renunciation of War signed at Paris on the twenty-seventh day of August, One thousand nine hundred and twenty-eight.

Article 10.

Should any difference arise relative to the application or the interpretation of this treaty, and should the High Contracting Parties fail to settle such difference by direct negotiation, then it shall be dealt with in accordance with the provisions of the Covenant of the League of Nations.

Article 11.

This treaty shall be ratified and ratifications shall be exchanged as soon as possible. Thereafter it shall come into force as soon as 'Iraq has been admitted to membership of the League of Nations.

The present treaty shall remain in force for a period of twenty-five years from the date of its coming into force. At any time after twenty years from the date of the coming into force of this treaty, the High Contracting Parties will, at the request of either of them, conclude a new treaty which shall provide for the continued maintenance and protection in all circumstances of the essential communications of His Britannic Majesty. In case of disagreement in this matter, the difference will be submitted to the Council of the League of Nations.

In faith whereof the respective plenipotentiaries have signed the present treaty and have affixed thereto their seals.

Done at Baghdad in duplicate this thirtieth day of June, One thousand nine hundred and thirty, of the Christian Era, corresponding to the fourth day of Safar, One thousand three hundred and forty-nine, Hijrah.

(L.S.)

F. H. HUMPHRYS.

(L.S.)

NOURY SAID.

ANNEXURE TO TREATY OF ALLIANCE.

1. The strength of the forces maintained in 'Iraq by His Britannic Majesty in accordance with the terms of Article 5 of this treaty shall be determined by His Britannic Majesty from time to time after consultation with His Majesty the King of 'Iraq.

His Britannic Majesty shall maintain forces at Hinaidi for a period of five years after the entry into force of this treaty in order to enable His Majesty the King of 'Iraq to organize the necessary forces to replace them. By the expiration of that period the said forces of His Britannic Majesty shall have been withdrawn from Hinaidi. It shall be also open to His Britannic Majesty to maintain forces at Mosul for a maximum period of five years from the entry into force of this treaty. Thereafter it shall be open to His Britannic Majesty to station his forces in the localities mentioned in Article 5 of this treaty, and His Majesty the King of 'Iraq will grant to His Britannic Majesty for the duration of the alliance leases of the necessary sites for the accommodation of the forces of His Britannic Majesty in those localities.

2. Subject to any modifications which the two High Contracting Parties may agree to introduce in the future, the immunities and privileges in jurisdictional and fiscal matters, including freedom from taxation, enjoyed by the British forces in 'Iraq will continue to extend to the forces referred to in Clause 1 above, and to such of His Britannic Majesty's forces of all arms as may be in 'Iraq in pursuance of the present treaty and its annexure or otherwise by agreement between the High Contracting Parties and the existing provisions of any local legislation affecting the armed forces of His Britannic Majesty in 'Iraq shall also continue. The 'Iraq Government will take the necessary steps to ensure that the altered conditions will not render the position of the British forces as regards immunities and privileges in any way less favourable than that enjoyed by them at the date of the entry into force of this treaty.

3. His Majesty the King of 'Iraq agrees to provide all possible facilities for the movement, training and maintenance of the forces referred to in Clause 1 above, and to accord to those forces the same facilities for the use of wireless telegraphy as those enjoyed by them at the date of the entry into force of the present treaty.

4. His Majesty the King of 'Iraq undertakes to provide at the request and at the expense of His Britannic Majesty and upon such conditions as may be agreed between the High Contracting Parties special guards from his own forces for the protection of such air bases as may, in accordance with the provisions of this treaty, be occupied by the forces of His Britannic Majesty, and to secure the enactment of such legislation as may be necessary for the fulfilment of the conditions referred to above.

5. His Britannic Majesty undertakes to grant whenever they may be required by His Majesty the King of 'Iraq all possible facilities in the following matters, the cost of which will be met by His Majesty the King of 'Iraq.

- (a) Naval, military and aeronautical instruction of 'Iraqi officers in the United Kingdom.
- (b) The provision of arms, ammunition, equipment, ships and aeroplanes of the latest available pattern for the forces of His Majesty the King of 'Iraq.
- (c) The provision of British naval, military and air force officers to serve in an advisory capacity with the forces of His Majesty the King of 'Iraq.

6. In view of the desirability of identity in training and methods between the 'Iraq and British armies, His Majesty the King of 'Iraq undertakes that, should he deem it necessary to have recourse to foreign military instructors, these shall be chosen from amongst British subjects.

He further undertakes that any personnel of his forces that may be sent abroad for military training will be sent to military schools, colleges and training centres in the territories of His Britannic Majesty, provided that this shall not prevent him from sending to any other country such personnel as cannot be received in the said institutions and training centres.

He further undertakes that the armament and essential equipment of his forces shall not differ in type from those of the forces of His Britannic Majesty.

7. His Majesty the King of 'Iraq agrees to afford, when requested to do so by His Britannic Majesty, all possible facilities for the movement of the forces of His Britannic Majesty of all arms in transit across 'Iraq and for the transport and storage of all supplies and equipment that may be required by these forces during their passage across 'Iraq. These facilities shall cover the use of the roads, railways, waterways, ports and aerodromes of 'Iraq, and His Britannic Majesty's ships shall have general permission to visit the Shatt-al-Arab on the understanding that His Majesty the King of 'Iraq is given prior notification of visits to 'Iraq ports.

(Initialed) F. H. H.
N.S.

NOTES EXCHANGED WITH THE 'IRAQ PRIME MINISTER EMBODYING THE SEPARATE AGREEMENT ON FINANCIAL QUESTIONS REFERRED TO IN THE SECOND EXCHANGE OF NOTES APPENDED TO THE ANGLO-'IRAQ TREATY OF JUNE 30TH, 1930. (C.M.D. 3627.)

I.

LONDON,
19th August, 1930.

Sir,

With reference to our conversations in London, I have the honour to propose that the following provisions shall be considered as embodying the separate agreement on all financial questions referred to in the second exchange of notes between your Excellency and myself at the time of the signature of the Treaty of Alliance on June 30th, 1930.

It is understood that the agreement constituted by this note and by your Excellency's reply thereto shall be included in the instruments of ratification of the Treaty of Alliance and shall become operative on the exchange of ratifications.

1. The Government of the United Kingdom of Great Britain and Northern Ireland shall transfer to the 'Iraq Government, within the period stipulated in Clause 1 of the annexure to the Treaty of Alliance signed on June 30th, 1930, the aerodromes and encampments at Hinaidi and Mosul at present occupied by the forces of His Britannic Majesty, and the 'Iraq Government shall accept the transfer thereof (less two "A" type steel hangars and the ice plants at Hinaidi and Mosul to be removed by the Government of the United Kingdom) at one-third of the cost price certified as correct by the Air Ministry of the Government of the United Kingdom, of the permanent buildings, plant and structures thereon, no account being taken of the mud buildings which shall be transferred to the 'Iraq Government free of cost. The 'Iraq Government shall pay this sum to the Government of the United Kingdom not later than the date upon which the aforesaid transfer is completed.

During the maximum period stipulated in Clause 1 of the annexure to the Treaty of Alliance, the forces of His Britannic Majesty shall remain in undisturbed occupation of their present stations of Hinaidi and Mosul and at Shaiba and in the use of their existing emergency landing grounds, and the Government of the United Kingdom shall not be called upon to pay higher rental charges in respect thereof than those at present paid.

2. If upon the withdrawal of the forces of His Britannic Majesty from Hinaidi and Mosul in accordance with Clause 1 of the annexure to the Treaty of Alliance, the Government of the United Kingdom should decide to establish a British air base in the

neighbourhood of Habbaniya, then the 'Iraq Government shall take all possible steps, at no cost to either government, to arrange for the construction of a railway to connect such air base with the railway system of 'Iraq.

3. The leases of the sites for air bases to be granted to His Britannic Majesty, in accordance with the provisions of Article 5 of the Treaty of Alliance, shall, in so far as such sites are on waste Government land, be free of all rental charges, and, in so far as they are on non-Government land, every facility shall be given for their acquisition on reasonable terms, such acquisition being effected by the 'Iraq Government at the request and at the cost of the Government of the United Kingdom. The leased lands shall be free of all taxes and rates and the leases shall continue so long as these bases remain in the occupation of the forces of His Britannic Majesty in accordance with the provisions of the aforesaid Treaty of Alliance or of any extension thereof. On the final termination of the leases of the said sites, or of any one of them, the 'Iraq Government shall either themselves take over the buildings and permanent structures thereon at a fair valuation, having regard to the use to which they have been put, or shall afford such facilities as may reasonably be necessary to enable the Government of the United Kingdom to dispose thereof to the best advantage.

After the expiry of the maximum period stipulated in Clause 1 of the annexure to the Treaty of Alliance and so long as the said Treaty of Alliance remains in force the Government of the United Kingdom shall not be called upon to pay any charges in respect of the use of any of the existing emergency landing grounds in 'Iraq.

4. The following arrangements for the disposal and administration of the 'Iraq railway system shall be carried into effect as soon as possible and in any case within a maximum period of one year from the entry into force of the Treaty of Alliance :—

(a) Legal ownership of the railway system shall be transferred by the Government of the United Kingdom to the 'Iraq Government and registered in the name of the 'Iraq Government, and simultaneously with such transfer full beneficial ownership shall be vested, by lease or otherwise, and at a nominal rent and on terms satisfactory to the Government of the United Kingdom, in a special body or corporation having legal personality, to be constituted by a special statute of the 'Iraq legislature, the terms of which shall have been agreed by both governments.

(b) The above-mentioned corporation shall be wholly responsible for the administration and management of the 'Iraq railway system, and, subject to such limitations as may be imposed in the statute referred to above, shall have sole and exclusive authority

to raise new capital by public issue or private loan and to dispose of the revenues of that system.

(c) The capital of the said corporation shall comprise :—

- (i) Rs275 lakhs of preferred stock, bearing interest at 6 per cent., such interest being non-cumulative for a period of twenty years from the date of the transfer of the ownership of the system and thereafter cumulative, to be allotted to the Government of the United Kingdom, of which Rs25 lakhs represents the capitalized value of the debt of the railways to the Government of the United Kingdom on liquidation account ;
- (ii) Rs45.85 lakhs of similar preferred stock, to be allotted to the 'Iraq Government, being an amount equal to the loans which the 'Iraq Government have made to the railways on which interest charges have been waived ; and
- (iii) Rs250 lakhs of deferred stock also to be allotted to the 'Iraq Government.

The 'Iraq Government shall have the option to buy at any time at par the stock allotted to the Government of the United Kingdom.

(d) The board of the corporation shall consist of five directors, of whom two shall be appointed by the Government of the United Kingdom and two by the 'Iraq Government, and the fifth, who shall be the chairman, shall be appointed by both governments in agreement. The first chairman shall be the present director of the 'Iraq railways.

(e) The corporation shall be responsible for raising loan capital required for the reconditioning and development of the 'Iraq railway system, and neither government shall be under any obligation to guarantee such loan capital either in respect of interest or of capital.

(f) Any loan capital raised by the corporation for the reconditioning or development of the 'Iraq railway system shall rank before the stock allotted to the two governments in accordance with Clause (c) above.

(g) The 'Iraq Government, as owners of the equity of the system, shall accept ultimate responsibility for any liabilities relating thereto, not devolving upon the corporation, that may subsequently come to light and in consideration thereof the Government of the United Kingdom shall transfer to the 'Iraq Government an amount of preferred stock of a nominal value equal to the amount of any irrecoverable disbursements that the 'Iraq Government may have to make in the discharge of any of the aforesaid liabilities, the validity of which may have been established to the satisfaction of the Government of the United Kingdom.

(h) In anticipation of the transfer of the railway system and the establishment of the corporation, the 'Iraq Government shall forthwith grant three-year contracts, on "treaty" conditions, to such British railway officials as may be recommended therefor by the director of the 'Iraq railways, and shall not terminate any such contracts when granted except with the agreement of the Government of the United Kingdom. The question of granting these officials contracts of longer duration shall be left for the decision of the corporation when constituted.

5. The property in the port of Basra at present held by the Government of the United Kingdom shall be transferred to the 'Iraq Government and the port shall be administered by a port trust. For this purpose legislation in terms agreed with the Government of the United Kingdom shall be enacted in 'Iraq for the establishment of a port trust having legal personality and such legislation shall not be amended, except by agreement with the Government of the United Kingdom, so long as any part of the debt owing to the Government of the United Kingdom in respect of the port is still outstanding.

Upon the enactment of the above legislation and the establishment of the port trust, the property in the port shall be transferred to the 'Iraq Government in whose name it will then be registered, and, simultaneously with such transfer, full beneficial ownership shall be conferred, by lease, concession or other appropriate instrument, the terms of which shall be subject to the approval of the Government of the United Kingdom, upon the port trust for the period during which any part of the debt owing to the Government of the United Kingdom in respect of the port remains outstanding.

I have, etc.,

(Signed) F. H. HUMPHRYS.

HIS EXCELLENCY, NURI PASHA AL SA'ID, C.M.G., D.S.O.,
Prime Minister and Minister for Foreign Affairs, 'Iraq.

II.

LONDON,
19th August, 1930.

Sir,

I have the honour to acknowledge the receipt of your note of to-day's date setting out the provisions to be considered as embodying the separate agreement on all financial questions referred to in the second exchange of notes between your Excellency and myself at the time of signature of the Treaty of Alliance on June 30th, 1930, and to confirm that your note accurately sets out the agreement at which we have arrived.

I have, etc.,

(Signed) NOURY SAID.

HIS EXCELLENCY, SIR F. H. HUMPHRYS,
G.C.V.O., C.M.G., K.B.E., C.I.E.,
His Britannic Majesty's High Commissioner in 'Iraq.

APPENDIX C.

THE AGREEMENTS OF BAHRA AND HADDA.

Bahra Agreement.

TRANSLATION.

Whereas with a view to securing good relations between the two Governments of 'Iraq and Nejd, a treaty known as the Muhammara Convention was agreed upon between those two governments and signed on the 7th Ramadan, 1340 (corresponding to May 5th, 1922), and

Whereas the aforesaid treaty was supplemented by two protocols, known respectively as Protocol No. 1 and Protocol No. 2 of the Muhammara Convention, which were signed at 'Uqair on the 12th Rabi' Thani, 1341 (corresponding to the 2nd December, 1922), and

Whereas the aforesaid treaty and protocols have been duly ratified by the two Governments of 'Iraq and Nejd, and

Whereas in Article 1 of the aforesaid Muhammara Convention the Governments of 'Iraq and of Nejd have guaranteed mutually that they will prevent aggression by their tribes on the tribes of the other and will punish their tribes for any such aggression, and, should the circumstances not admit of such punishment, the two governments will discuss the question of taking combined action according to the good relations prevailing between them, and

Whereas it is considered advisable by His Britannic Majesty's Government and by the two governments aforementioned, in the interests of friendship and good relations between the two countries of 'Iraq and Nejd to come to an agreement regarding certain matters which are outstanding between those two countries

We, the undersigned, His Highness 'Abdu'l-'Aziz ibn 'Abdu'r-Rahman al-Faisal Al Sa'ud, Sultan of Nejd and its Dependencies, and Sir Gilbert Clayton, K.B.E., C.B., C.M.G., the duly accredited Commissioner and Plenipotentiary of His Britannic Majesty's Government, who has been empowered to come to an agreement and sign on behalf of the 'Iraq Government, have agreed upon the following articles :—

Article 1.

The States of 'Iraq and Nejd severally recognize that raiding by tribes settled in their territories into the territory of the other

State is an aggression which necessitates the severe punishment of the perpetrators by the government to which they are subject, and that the chief of the tribe committing such aggression is to be held responsible.

Article 2.

(a) A special tribunal shall be set up, by agreement between the two Governments of 'Iraq and Nejd, which shall meet from time to time to inquire into the particulars of any aggression committed across the frontier between the two States, to assess the damages and losses and to fix the responsibility. This tribunal shall be composed of an equal number of representatives of the Governments of 'Iraq and Nejd, and its presidency shall be entrusted to an additional person, other than the aforesaid representatives, to be selected by the two governments in agreement. The decisions of this tribunal shall be final and executory.

(b) When the tribunal has fixed the responsibility, assessed the damages and losses resulting from the raid, and issued its decision in that respect, the government to whom those found guilty are subject shall execute the aforesaid decision in accordance with tribal customs, and shall punish the guilty party in accordance with Article 1 of the present agreement.

Article 3.

Tribes subject to one of the two governments may not cross the frontier into the territory of the other government except after obtaining a permit from their own government and after the concurrence of the other government; it being stipulated, however, in accordance with the principle of the freedom of grazing, that neither government shall have the right to withhold such permit or concurrence if the migration of the tribe is due to grazing necessities.

Article 4.

The two Governments of 'Iraq and Nejd undertake to stand in the way, by all the means at their disposal other than expulsion and the use of force, of the emigration of any tribe or section of a tribe from one of the two countries into the other unless its emigration takes place with the knowledge and consent of its government. The two governments undertake to abstain from offering any present of whatsoever kind to refugees from the territories of the other government, and to look with disfavour on any of their subjects who may seek to entice tribes belonging to the other government or to encourage them to emigrate from their country into the other country.

Article 5.

The Governments of 'Iraq and Nejd may not correspond with the chiefs and sheikhs of tribes subject to the other State on official or political matters.

Article 6.

The forces of 'Iraq and Nejd may not cross the common frontier in the pursuit of offenders except with the consent of both governments.

Article 7.

Sheikhs of tribes who hold an official position or who have flags showing that they are the leaders of armed forces may not display their flags in the territory of the other State.

Article 8.

In case one of the two governments were to call upon tribes residing in the territory of the other State to furnish armed contingents, the said tribes will be free to respond to the call of their government on condition that they betake themselves with their families and belongings in complete tranquillity.

Article 9.

In case a tribe were to emigrate from the territory of one of the two governments into the territory of the other government and were subsequently to commit raids into the territory in which it formerly resided, it will be open to the government into whose territory this tribe has immigrated to take from it adequate guarantees on the understanding that, if a similar aggression were to be repeated by the tribe, those guarantees would be liable to confiscation, without prejudice to the punishment to be inflicted by the government as provided in Article 1, and without prejudice to whatever impositions may be decreed by the tribunal specified in Article 2 of the present agreement.

Article 10.

The Governments of 'Iraq and Nejd undertake to initiate friendly discussions with a view to concluding a special agreement in respect of the extradition of criminals in accordance with the usage prevailing among friendly States, within a period not exceeding one year from the date of the ratification of the present agreement by the Government of 'Iraq.

Article 11.

The Arabic version is the official test to be referred to in the interpretation of the articles of the present agreement.

Article 12.

The present agreement shall be known as "The Bahra Agreement."

Correspondence relating to the Bahra Agreement.

MEMORANDUM.

Presented by His Highness the Sultan of Nejd after the sixth meeting to Sir Gilbert Clayton, K.B.E., etc., His Britannic Majesty's Commissioner and Plenipotentiary.

TRANSLATION.

1ST RABI' THANI 1344

(19th October, 1925).

1. I have the honour to inform your Excellency that the Government of Nejd are still of opinion that it is necessary to examine the possibility of extraditing criminals, in the hope of ensuring peace on the frontier and of preventing all disturbers of the peace effectively. My insistence in this matter is due to the particular experience I have, and to my knowledge of desert conditions. My first object is to prevent any rivalry or friction from arising between the two governments, and in this I am actuated by three main motives :—

- (a) Religion and honour, which compels us to act truthfully and in keeping with our pledges ;
- (b) Our special ties of friendship with His Majesty's Government, which make it incumbent upon us to take a far-sighted view ;
- (c) Our desire to live in peace, quiet and amity with our neighbours the State of 'Iraq.

2. I am of opinion that the agreement which you presented for discussion this morning, although it may achieve some of the purposes for which we strive, does yet leave the door open to a great number of troublesome incidents of a kind of which we have had cause to complain in the past. In particular, I have submitted to you the following incidents as being of the kind which habitually occur in life in the desert :—

- (a) What should the attitude of the Nejd Government be if an 'Iraqi tribe, having committed a reprehensible crime involving killing and plunder, were to take refuge in Nejd ; and what would the same government's attitude be if that refugee tribe were to commit the same crime, notwithstanding guarantees being taken from it ;
- (b) What should the attitude of each of the Governments of 'Iraq and of Nejd be if a Nejd tribe, having been punished by the Nejd Government for a raid into 'Iraq, were to take refuge into 'Iraq and then to raid Nejd from 'Iraq, as was done by those tribes who had taken refuge with Nejd and then gone over to 'Iraq, after the well-known incidents connected with Yusuf Sa'dun ?

The Hadda Agreement.

ARABIA.

AGREEMENTS WITH THE SULTAN OF NEJD, REGARDING CERTAIN QUESTIONS RELATING TO THE NEJD—TRANSJORDAN AND NEJD—‘IRAQ FRONTIERS.

The High British Government on its own part and His Highness ‘Abdu’l-‘Aziz ibn ‘Abdu’r-Rahman al-Faisal Āl Sa‘ud, Sultan of Nejd and its Dependencies on behalf of the Government of Nejd, on his part, in view of the friendly relations which exists between them, being desirous of fixing the frontier between Nejd and Transjordan and of settling certain questions connected therewith, the High British Government have named and appointed Sir Gilbert Clayton, K.B.E., C.B., C.M.G., as their Commissioner and Plenipotentiary, to conclude an agreement for this purpose with Sultan ‘Abdu’l-‘Aziz ibn ‘Abdu’r-Rahman al-Faisal Āl Sa‘ud on behalf of Nejd.

In virtue of which the said Sultan ‘Abdu’l-‘Aziz ibn ‘Abdu’r-Rahman al-Faisal Āl Sa‘ud and the said Sir Gilbert Clayton, have agreed upon and concluded the following articles :—

Article 1.

The frontier between Nejd and Transjordan starts in the north-east from the point of intersection of meridian 39° E. and parallel 32° N., which marks the termination of the frontier between Nejd and ‘Iraq, and proceeds in a straight line to the point of intersection of meridian 37° E. and parallel 31° 30’ N., and thence along meridian 37° E. to the point of its intersection with parallel 31° 25’ N. From this point, it proceeds in a straight line to the point of intersection of meridian 38° E. and parallel 30° N., leaving all projecting edges of the Wadi Sirhan in Nejd territory; and thence proceeds along meridian 38° E. to the point of its intersection with parallel 29° 35’ N.

The map referred to in this agreement is that known as the “ International ” Asia Map, 1 : 1,000,000.

Article 2.

The Government of Nejd undertake not to establish any fortified post at Kaf or utilize Kaf or the district in its neighbourhood as a military centre; and should they at any time consider it necessary to take exceptional measures in the neighbourhood of the frontier with a view to the maintenance of order or for any other purpose, involving the concentration of armed forces, they engage to notify His Majesty’s Government without delay.

The Government of Nejd undertake to prevent, by all the means at their disposal, any incursions by their forces into the territory of Transjordan.

Article 3.

In order to avoid misunderstanding over incidents which may arise in the neighbourhood of the frontier, and to promote mutual confidence and full co-operation between His Majesty's Government and the Government of Nejd, the two parties agree to maintain constant communication between the Chief British Representative in Transjordan or his delegate and the Governor of the Wadi Sirhan.

Article 4.

The Government of Nejd undertake to maintain all established rights that may be enjoyed in the Wadi Sirhan by tribes not under their jurisdiction, whether such rights appertain to grazing or to habitation, or to ownership, or the like ; it being understood that those tribes, so long as they reside within Nejd territory, will be subject to such internal laws as do not infringe those rights.

The Government of Transjordan undertake to extend identical treatment to Nejd subjects who may enjoy similar established rights in Transjordan territory.

Article 5.

The Governments of Nejd and Transjordan severally recognize that raiding by tribes settled in their territories into the territory of the other State is an aggression which necessitates the severe punishment of the perpetrators by the government to which they are subject, and that the chief of the tribe committing such aggression is to be held responsible.

Article 6.

(a) A special tribunal shall be set up, by agreement between the two Governments of Nejd and Transjordan, which shall meet from time to time to inquire into the particulars of any aggression committed across the frontier between the two States, to assess the damages and losses and to fix the responsibility. This tribunal shall be composed of an equal number of representatives of the Governments of Nejd and Transjordan, and its presidency shall be entrusted to an additional person, other than the aforesaid representatives, to be selected by the two governments in agreement. The decision of this tribunal shall be final and executory.

(b) When the tribunal has fixed the responsibility, assessed the damages and losses resulting from the raid, and issued its decision in that respect, the government to whom those found guilty are

subject shall execute the aforesaid decision in accordance with tribal customs, and shall punish the guilty party in accordance with Article 5 of the present agreement.

Article 7.

Tribes subject to one of the two governments may not cross the frontier into the territory of the other government except after obtaining a permit from their own government and after the concurrence of the other government; it being stipulated, however, in accordance with the principle of the freedom of grazing, that neither government shall have the right to withhold such permit or concurrence if the migration of the tribe is due to grazing necessities.

Article 8.

The two Governments of Nejd and Transjordan undertake to stand in the way, by all the means at their disposal other than expulsion and the use of force, of the emigration of any tribe or section of a tribe from one of the two countries into the other unless its emigration takes place with the knowledge and consent of its government. The two governments undertake to abstain from offering any present of whatsoever kind to refugees from the territories of the other government, and to look with disfavour on any of their subjects who may seek to entice tribes belonging to the other government or to encourage them to emigrate from their country into the other country.

Article 9.

The Governments of Nejd and Transjordan may not correspond with the chiefs and sheikhs of tribes subject to the other State on official or political matters.

Article 10.

The forces of Nejd and Transjordan may not cross the common frontier in the pursuit of offenders, except with the consent of both governments.

Article 11.

Sheikhs of tribes who hold an official position or who have flags showing that they are the leaders of armed forces may not display their flags in the territory of the other State.

Article 12.

Free passage will be granted by the Governments of Nejd and Transjordan to travellers and pilgrims, provided they conform to those regulations affecting travel and pilgrimage which may be in force in Nejd and Transjordan. Each Government will inform the other of any regulation issued by it in this matter.

Article 13.

His Britannic Majesty's Government undertake to secure freedom of transit at all times to merchants who are subjects of Nejd for the prosecution of their trade between Nejd and Syria in both directions ; and to secure exemption from Customs and other duty for all merchandise in transit which may cross the mandated territory on its way from Nejd to Syria or from Syria to Nejd, on condition that such merchants and their caravans shall submit to whatever Customs inspection may be necessary, and that they shall be in possession of a document from their government certifying that they are *bona fide* merchants ; and provided that trading caravans carrying merchandise will follow established routes, to be agreed upon hereafter, for their entry into and their exit from the mandated territory ; it being understood that the above restrictions will not apply to trading caravans whose trade is confined to camels and other animals, or to tribes migrating in accordance with the preceding articles of the present agreement.

His Britannic Majesty's Government further undertake to secure such other facilities as may be possible to merchants who are subjects of Nejd and who may cross the area under British mandate.

Article 14.

This agreement will remain in force for so long as His Britannic Majesty's Government are entrusted with the mandate for Trans-jordan.

Article 15.

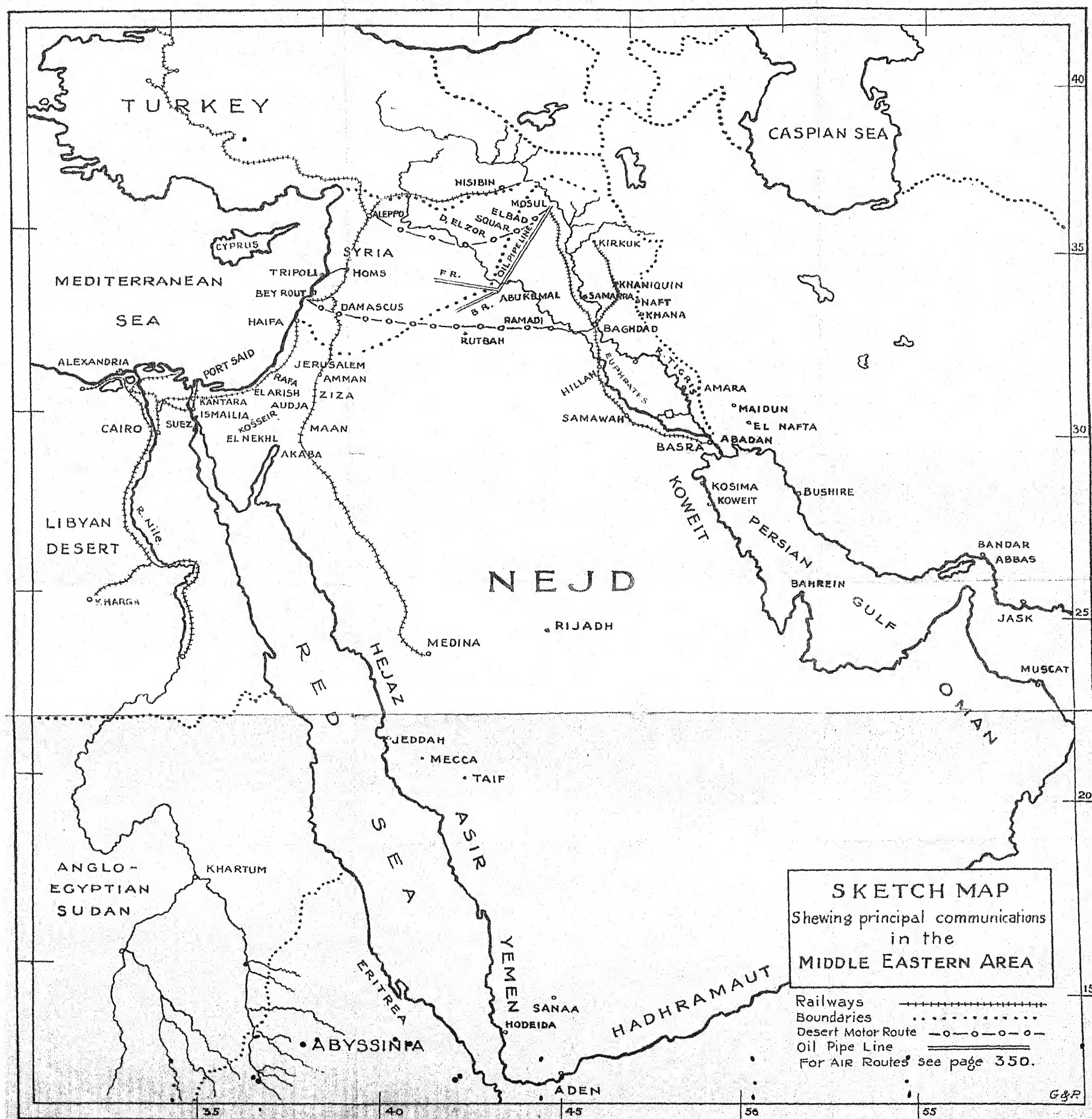
The present agreement has been drawn up in the two languages, English and Arabic, and each of the High Contracting Parties shall sign two English copies and two Arabic copies. Both texts shall have the same validity, but in case of divergence between the two in the interpretation of one or other of the articles of the present agreement, the English text shall prevail.

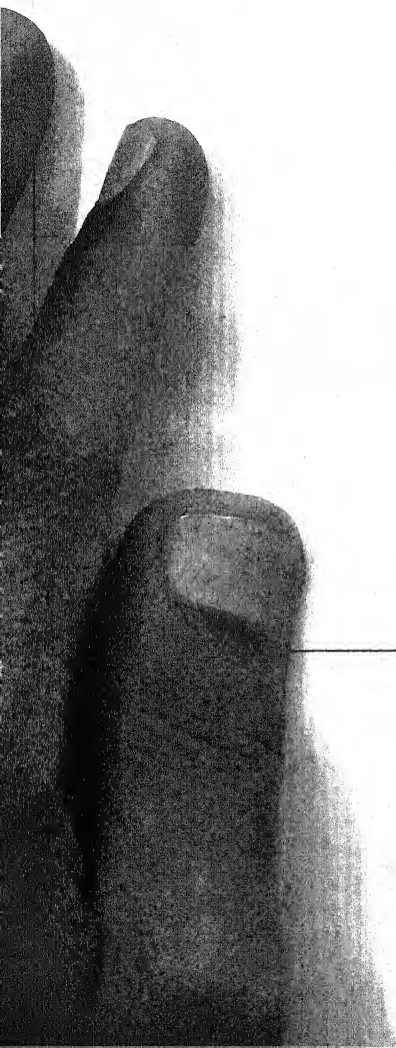
Article 16.

The present agreement will be known as the Hadda Agreement.

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CHAPTER XV

THE SEA COMMUNICATIONS OF THE BRITISH EMPIRE

A GLOBE will show one outstanding fact about Great Britain. This is the sea centrality of these islands. It is upon this fact that we have been able to build up an Empire whose political and commercial dominion is world-wide. The island of England "lies wholly in the sea and yet at the precise centre of all the land of the Earth. No other spot upon the globe either fulfils or can ever be made to fulfil these two conditions. Turn the globe as you will, contrive and consider as you please: in the end the hard geographical fact will remain that England, alone of all the communities of men, has the sea centrality of the world."*

Even beyond trade and defence, important though they are, the real imperial unity of the later nineteenth and early twentieth centuries has been developed by, and will be maintained by, the union of ideas. "The question of communications is, therefore, probably the most important of all for the British Empire. One may adopt a legal phrase and say that communications are the essence of our Empire, and unless we succeed in solving some of the urgent problems of communications—more rapid and cheaper communications—it will be almost impossible in the future to hold together this vast Empire scattered over the whole globe. The Empire is developing in all its constituent parts to such an extent that unless we can solve this problem of communications the machinery for working this Empire will fail."†

The 1923 Imperial Conference, recognizing the overwhelming importance of the safeguarding of the sea communications of the Empire, made the following recommendations in respect of their maintenance and defence:—

- (1) Adequate provision for safeguarding the maritime communications of the several parts of the Empire and the routes and waterways along and through which their armed forces and trade pass.
- (2) The provision of naval bases and facilities for repair and fuel so as to ensure the mobility of the fleets.

While this sea centrality is the possession of Great Britain alone, the sea contact is shared by all the Empire's parts alike, although in some cases in lesser degree, so that contact is maintained by the

* "The Strength of England," Bowles, by permission of Messrs. Methuen

† General Smuts, quoted in C.M.D. 2009.

oceans and their external traffic is across the sea. Canada alone of all the Empire bases is in direct contact by land with a great civilized Power; even India is mainly insular in that she is separated from other nations by land frontiers of great natural strength and the bulk of her external traffic is by sea. The dependencies in Africa border upon the dependencies of other European Powers, and therefore, again, their defence is a naval question.

With regard to defence, a study of the map will show that while nearly six-sevenths of the white population of the Empire is centred round the North Atlantic, two-thirds of its area and four-fifths of its total population are grouped round the Indian Ocean. Hence the strength of Empire defence lies round the North Atlantic and the greater part of its responsibility is round the Indian Ocean.

The vital lines of communication, therefore, whether in peace or war, are those

- (a) That connect the white population lying round the North Atlantic; and
- (b) Lines that connect the North Atlantic peoples with the areas lying round the Indian Ocean.

These lines of communication may be summarized:—

(1) The North Atlantic Routes between Great Britain and Canada and Newfoundland.

(2) Those between the North Atlantic and the Indian Ocean Lands:—

- (a) Via the Cape of Good Hope,
- (b) Via the Mediterranean Sea.

Across the Pacific:—

- (c) From Western Canada,
- (d) Via Cape Horn,
- (e) Via the Panama Canal.

Inwards along these routes pass the food and raw material necessary for the industrial centres of Great Britain; outwards pass the manufactured products of the country in peace, and also the troops, munitions and supplies required for Empire defence in war.

It is in this latter respect that Great Britain differs fundamentally from the other great nations. Whereas in peace time the seaways of the world are open to all, in war other nations can carry out their military concentrations by road and rail within their own territory and relatively free from interference, but for Great Britain the seaways must serve for the concentration of her forces. These lines of communication are necessarily of considerable length and liable to attack at many points. Their defence, therefore,

requires primarily a navy to guard; and, secondly, bases from which the fleet can operate.

The defence of these lines of communication is conditioned by three factors:—

- (1) The steaming distances between Great Britain and the overseas bases.
- (2) The position upon these routes of safe and suitable ports of call.
- (3) The position relative to (1) and (2) of the ports of foreign Powers.

The first and second of the above factors are closely related. Distance is not *per se* an overwhelming disadvantage provided that ports of call are well sited along a given route. The second and third factors are also closely related, since the ports of call upon a route supply the navy with its strength and mobility for the protection of the route, the efficiency of which is conditioned by the siting of the sea fortresses of foreign Powers.

In view, therefore, of the facilities they offer to ships of every type, it is clear that the fullest use of geographical advantage must be made in the siting of these positions. Such positions will be of maximum advantage where shipping is most congested on the lines of communication or where, passing close to land, it loses the natural protection of the open spaces of the oceans. These positions are, for example, Gibraltar and Port Said, Suez and Singapore, the entrances and exits of the Mediterranean Sea and Indian Ocean respectively; Freetown, the Falkland Islands or the Bermudas, flanking respectively the routes to the Cape, the Pacific and the Atlantic route from New York to the Panama Canal.* It may be here noted that the German South-West African campaign was undertaken to prevent the use of that colony as a position flanking British sea routes to the Cape, and that the acquisition of Tanganyika Territory has made practically the entire western flank of the Indian Ocean British.

Cape Town, Colombo and Singapore are turning-points close to which vessels must pass *en route* to Australia, India or China.

Cape Verde exemplifies an area in which many vessels enter a stream of shipping approaching European ports.

It must be borne in mind that the value of these nodal points is neither absolute nor permanent and that they fulfil their designed functions only under present conditions, and that consequently changes—such, for instance, as the increased radius of action of surface and submersible vessels or of aircraft—may render some unnecessary in peace or untenable in war. It has been stated that the new German cruisers are able to steam without

* cf. Fayle, "Sea-borne Trade," Vol. I, cc. 3 and 4. Vol. II, c. 6.

refuelling from the North Sea to Freemantle;* or, again, it is possible that Gibraltar or Malta might be rendered untenable to a fleet by reason of aircraft action.

Before studying in detail the principal sea routes of the Empire, it should be repeated that these strategic points do not constitute sea power, but that they are only the outward and visible signs thereof, and that their function is to increase the mobility of the fleet; they are sea fortresses from which a fleet may perform its "police" duties, to control traffic or to check those who design to interfere with the lawful uses of the highways of the sea.

From a purely military point of view the seaways of the world that are of the greatest importance are those that connect Great Britain with the main white bases of the Empire and with the Dependencies. These routes are:—

- (1) Great Britain and Canada,
- (2) Great Britain and Australia and New Zealand,
- (3) Great Britain and South Africa,
- (4) Great Britain and India and the Far East,
- (5) Great Britain and the African Dependencies.

These routes, some 80,000 miles in total length, may, since the oceans are one and indivisible, be conveniently reduced to three:—

- (a) The Atlantic Routes,
- (b) The Mediterranean and Indian Ocean Routes,
- (c) The Pacific Route.

Before considering the separate lines of intercommunication between the Empire bases, the protection of the areas where these separate lines converge around the British Isles must be dealt with.†

The position of Great Britain off the west coast of the European continent is obviously one of the greatest commercial and strategic importance. By far the greater part of the sea-borne traffic of Europe relies upon ports lying within two lines which may be drawn from Cape Finisterre to the Orkneys and from the Orkneys to the Naze of Norway. It may be said, therefore, that England holds the key to the two sea-gates of Europe, and derives immense strategic power from a position which allows her to control shipping entering Belgian, Dutch, Danish, German or the Baltic ports.

Lines of communication in the Atlantic tend to centralize in an area lying roughly between Cape Clear, Milford Haven, Land's End and Ushant, and it was in this area that German submarines

* The designed speed of the *Ersatz Prussen*, the first so-called "pocket battleship," is 26 knots, with a cruising radius of 18,000 sea miles.

† See also Chapter XX and Fayle, *op. cit.*

became firmly established and did most damage. Submarines and aircraft based on Cherbourg and Brest would make this area even more dangerous than the German submarines were able to do from their bases on the Belgian coast. Experience gained during the General War showed that the protection of all the lines of communication was impossible, and that, though many casualties might be suffered, the safeguarding of shipping in congested areas was the paramount necessity. The convoy system, combined with adequate protection of these areas of convergence, was found to produce the maximum of satisfactory results for the least possible expenditure of effort. In regard to the effective value of the convoy system, it may here be noted that whereas in May, 1917, before the convoy system was instituted, 303 vessels were sunk by "U"-boats, in November of the same year, six months only after the system had been put into force, this figure was reduced to 116 vessels. It is the recognition of this strategic principle that has made possible the progressive reductions in naval strength, but the same principle makes it clear that a strength insufficient to protect these vital areas would be fatal to the whole strategic conception upon which the protection of British sea communication is based.

Communications in the Atlantic Ocean.

From the point of view of commerce, the Atlantic Ocean routes surpass all others in importance, carrying approximately 75 per cent. of the world's sea-borne traffic.* This is accounted for by the fact that it serves to connect the industrialized areas of North-Western Europe and North America, while southwards it brings to these areas the raw materials of the agricultural communities of the South American and African continents and carries back the manufactured products of the industrial areas.

Strategically the Commonwealth is well placed upon the Atlantic, though certain factors have recently served not to improve the general position. These may be summarized :—

- (1) Great Britain commands the sea routes between North-Eastern Europe and the Americas.
- (2) Almost the entire eastern flank of the South Atlantic is British.
- (3) The western flank of the South Atlantic washes the shores of the South American continent, between whose peoples and Great Britain friendship is traditional.
- (4) But shipping approaching the British Isles is dangerously congested and liable to attack by aircraft, submarines and quick cruiser attack from European ports. This

* cf. Fayle, *op. cit.*, cc. 6 and 9.

area, as has been noted previously, lies between Cape Clear, Milford Haven, Land's End and Ushant, and would be dangerously threatened in the event of a war with France from the ports of Brest and Cherbourg.

- (5) The growth of the U.S.A. Navy and American territorial expansion in the Caribbean Sea are disadvantageous factors in the general strategy of the Atlantic.

The principal routes of the Atlantic and the distances from Liverpool are as follows:—

GREAT BRITAIN TO CANADA.

(1) Liverpool to Halifax	..	..	..	..	2,490 miles.
(2) Liverpool to Quebec	..	..	..	..	2,630 „
(3) Liverpool to Montreal	..	..	..	..	2,760 „
(4) Liverpool to Port Churchill	..	..	..	..	2,975 „

GREAT BRITAIN TO SOUTH AMERICAN CONTINENT.

(5) Liverpool to Colon	..	..	..	..	4,550 miles.
(6) Liverpool to Pernambuco	..	..	..	..	4,190 „
(7) Liverpool to Rio de Janeiro	..	..	..	..	5,160 „
(8) Liverpool to Buenos Ayres	..	..	..	..	6,260 „

Route (1) is the winter route between Great Britain and Canada. The port of Halifax (Nova Scotia) is ice-free during the winter. It is the headquarters of the Royal Canadian Navy, and is garrisoned by regular Canadian troops.

The harbour, 10 square miles in extent, is well provided, and is the sea terminus of the Canadian National Railway system connecting Halifax with the main recruiting and industrial centres of the Dominion. Halifax also flanks the great circle course between the English Channel and the American ports of Boston, New York and Chesapeake Bay.

Routes (2) and (3): These ports, though closed in winter and often rendered difficult of approach by fog, are convenient by reason of their situation. The routes, however, are flanked by the two French islands of St. Pierre and Miquelon, situated in the Cabot Strait.

Route (4): This route will provide an alternative approach to Canada when the railway Le Pas—Port Churchill is completed. It is not completely ice-free, though it is claimed that passage can be made by ice-breakers.

Though the distance to Fort Nelson is some 200 miles further than to Montreal, it is actually shorter from Liverpool to Vancouver via Fort Nelson than from Liverpool to Vancouver via Montreal.

Except for St. Pierre and Miquelon noted above, routes (1) to (4) are not effectively flanked by any foreign Powers.

Route (5): The shortest route from Liverpool to the Panama Canal is through the Mona Passage between Haiti and Porto Rico (U.S.A.). It is protectively flanked, though not closely, by the Bermudas.

Routes (6) to (8): These routes are flanked at considerable distance by Cape Verde Islands (Portuguese), and by Madeira and Canary Islands (Spanish). Both these Powers are non-military, and the former traditionally friendly with Great Britain.

Problems of the Atlantic.

(1) The Position of Great Britain.

Whereas in the Pacific the three great naval Powers—Great Britain, United States of America and Japan—are all vitally concerned, in the Atlantic only the first two named are supremely interested. The first need of Great Britain is to maintain her communications with Canada, not only for the protection of that Dominion, but to safeguard it as a “transit” country between the Atlantic and the Pacific, in which ocean in addition Canadian interests are great and increasing.

For Great Britain the strategic importance of the Atlantic has declined since the struggle with Napoleon was finished and during the period of “splendid isolation” when the defence of the British Islands rested upon a fleet which was the decisive factor in the European balance of power.

The decline in the economic importance of the West Indian Islands has also lightened British responsibilities in the Caribbean, in which sea the elimination of French and Spanish influence has left the U.S.A. practically supreme.

So long as Great Britain can secure the unfettered use of the sea routes of the Atlantic in peace and war, this ocean appears unlikely to be a theatre of hostilities.

BRITISH NAVAL BASES IN THE ATLANTIC.*

BERMUDAS.—Port Hamilton (Ireland Island) is a naval base and dockyard. The Bermudas, composed of a series of submerged sandbanks and coral reef, flank the route from Liverpool to Panama, and are, by reason of their central position and isolation, of strategic importance in the defence of the Atlantic. The islands are 720 miles from Halifax, 666 miles from New York and 3,000 miles from London. It is improbable that sufficient accommodation could ever be provided for a grand fleet, and lines of communication between Great Britain or Halifax and the islands would be threatened by the American fleet.

* For details of the distribution of the fleet reference should be made to Chapter V.

HALIFAX. (See page 310.)

JAMAICA.—The port of Kingston is a defended harbour at which facilities for the supply of bunker coal and oil exist.

FALKLAND ISLANDS.—Port Stanley in the Falkland Islands situated to the eastwards of Cape Horn is a fuelling and wireless station. The islands flank the route to the Pacific and occupy a position of considerable importance.

(2) The Position of the U.S.A.

The interests of the U.S.A. are both political, strategic and commercial.

Following the declaration of independence the United States, though recognizing the value of a fleet, as for instance that of the British fleet in 1798, turned its attention primarily towards the development of the resources of the American continent.

The gradual development of events was, however, to show that the U.S.A. could not escape the influence of the two oceans which washed her shores.

The independence of Latin South America, effected mainly under the cover of British sea power and leading to the enunciation by the U.S.A. of the Monroe doctrine, carried the boundaries of the U.S.A. into the Atlantic. "Before American independence the sea was a connecting link with Europe; after independence had been established it became a natural frontier and such it remains" (Ballard). The Monroe doctrine implies that no Power save America has any right to interfere with the affairs of the American continents, but this implication can only have value if backed by force. The maintenance of the sea power necessary to give effect to the determination of America to prevent interference in American affairs led inevitably to the elimination of Spain from the Caribbean. The sea power of America transferred to the U.S.A. the Spanish overseas empire in the Caribbean and the Pacific.

The protection of the Atlantic end of the Panama Canal, apart from its own land and air defences, is based upon the United States' possessions in the Caribbean and upon her naval bases in the Gulf of Mexico.

The commercial interests of the U.S.A. in the Atlantic have shown striking developments. America is now the greatest industrial nation in the world and is, therefore, like other nations, dependent upon the raw materials of the tropics for her industries. America in addition has an expanding export trade with the whole world. Her position, therefore, is becoming analogous to that of Great Britain, and for her as for Great Britain the control of sea communications is becoming a vital matter.

As was shown before, America is coming more and more under the influence of the two oceans which wash her shores, and though her traditional policy is one of detachment from European complications, she fought against France, Great Britain and Germany in succession in support of the unrestricted use of sea communications.

UNITED STATES' NAVAL BASES—ATLANTIC AND CARIBBEAN.

The principal U.S.A. navy yards are as follows:—Portsmouth (New Hampshire), Boston, New York, Philadelphia, Norfolk (Virginia), Charleston (Carolina), Key West and Pensacola (Florida) and New Orleans; Guantanamo (Cuba), Culebra; St. Thomas; Colon (Panama).

Of these, Norfolk possesses one dock able to take ships up to 1,000 feet in length and a second for the smaller Dreadnought class. New York can accommodate two vessels of the Dreadnought class, but cannot accommodate a battle cruiser. The yard at Boston has one dock for Dreadnoughts, and at Philadelphia one for Dreadnoughts and one for battle cruisers.

U.S. NAVAL AVIATION.

Naval aviation is controlled by the Bureau of Aeronautics, and is a part of the general organization of the U.S. Navy.

Naval aircraft are allotted to all battleships and light cruisers.

Naval air stations on the Atlantic are:—

Hampton Roads (Virginia).
Lakehurst (New Jersey) Airship Station.
Anacosta (environs of Washington, D.C.).
Rockaway (environs of New York).

U.S. BATTLE FLEET.

Three observation squadrons.
Two torpedo and bombing squadrons.
Five fighting squadrons.
Three aircraft carriers—*Saratoga*, *Lexington*, and *Langley*.

U.S. SCOUTING FLEET.

Two observation squadrons.
One torpedo and bombing squadron.

General Survey of the Atlantic Lines of Communication.

It has been noted above that while the general strategic position of Great Britain upon the Atlantic Routes is advantageous, it has been modified in recent years.

Prior to the territorial expansion of the United States in the Caribbean Sea and the opening of the Panama Canal, the possession of the Bermudas, Jamaica and other West Indian islands gave Great Britain a paramount position in the western North Atlantic and the Caribbean.

Though the importance of the Bermudas remains unaltered, Jamaica's importance has much declined. It is now ringed in by islands, the most important of which belong to, or are under the protection of, the United States.

The parity in the naval strength of the fleets of the United States and Great Britain has naturally entirely shifted the balance of power in these waters.

Although the opening of the Panama Canal has been of advantage to Great Britain by shortening the sea routes between this country and New Zealand and the western seaboard of the North and South American continents, the main advantages, commercial and strategical, of the Canal have remained with the United States.

Whereas before the Canal was opened the distances between Boston and New York and the East Coast ports of South America were no less than from British or Mediterranean ports, the distance between San Francisco and the same ports has been shortened by 6,000 miles. In the same way the distance between New York and Australia and New Zealand has been considerably reduced.

Strategically, for the same reason the fleets of the U.S.A., formerly divided into two bodies, can now be concentrated as a single unit in either ocean in under three weeks.

The increase in the military power of the U.S.A. in the Atlantic and Caribbean has at the same time been accompanied by marked growth of her political and commercial importance.

It is noted by Dr. Isaiah Bowman in his "The New World" that there has been added to the U.S.A. since 1898 an area of nearly 300,000 square miles containing a population of nearly 18,000,000, over half of which lies in the Caribbean and is of marked strategic importance.

Partly owing to the favourable position of the leading South American ports in relation to Great Britain and Southern Europe and partly to a natural neglect by the U.S.A. of the raw materials of South America, the Latin peoples have drawn closer commercially and culturally to Europe. It is to overcome this early neglect that the United States has been compelled to adopt during the present century a noticeably expansionist policy.

The Monroe doctrine, originally called into being with the help and goodwill of Great Britain, though intended to prevent the undue interference of Europe in the affairs of the young South American republics, and in this respect clearly a force for international good, is capable of being strained beyond its original implications.

The often lawless condition of Mexico and the many boundary disputes between the South American states frequently renders it necessary for the United States under the terms of the doctrine to interfere to protect foreign interests.

During the General War, British activity in South America naturally slackened, with corresponding advantage to North American business interests, which received definite Governmental assistance by the passing of the Webb Law of 1918, allowing combinations of business firms engaged in the export trade. By this means banking and exporting firms have agreed to pool their interests and increase the scope of their activities by co-operative rather than competitive methods.

In addition to British interests in the oil industry, the South American continent receives approximately 10 per cent. of the total exports of Great Britain, and there are as well very large amounts of British capital invested in public utility companies in the South American states, in particular in the Argentine. The South American continent is therefore a field of considerable rivalry between Great Britain and the United States, and it would probably express the British view that the Monroe doctrine should be maintained in the spirit as in the letter.

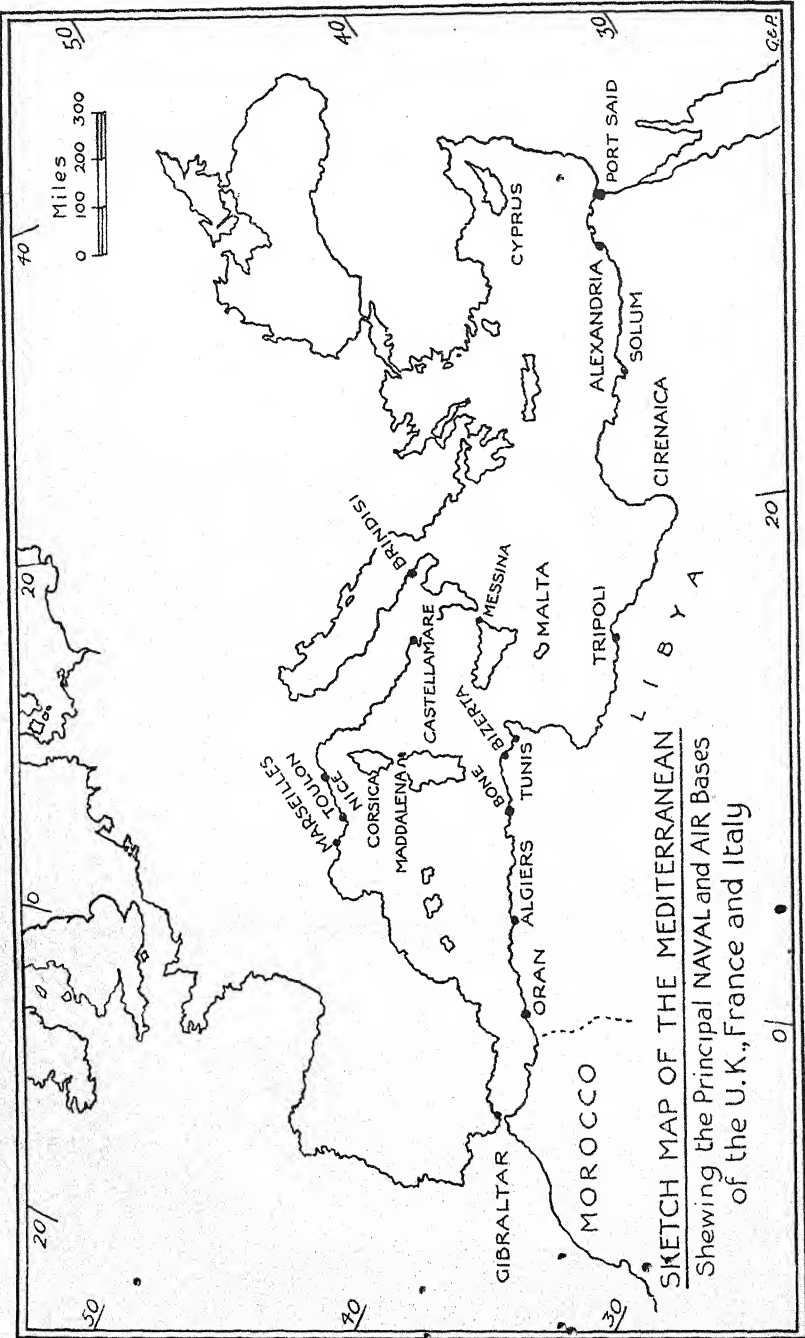
APPENDIX A.

TABLE SHOWING DISTANCES (IN ROUND FIGURES) BETWEEN THE CHIEF PORTS OF THE EMPIRE.

	Liverpool. (Gt. Britain.)	Halifax.	Port Said.	Cape Town.	Bombay.	Zanzibar.	Singapore.	Hong-Kong.	Melbourne.	Wellington.	Vancouver.
Liverpool ...	—	2,500	3,200	6,100	6,200	6,300	8,200	9,700	11,000	11,000	8,600
Halifax ...	2,500	—	4,500	6,400	7,600	8,100	9,600	11,000	10,300	8,900	6,000
Port Said ...	3,200	4,500	—	5,700	3,100	3,100	5,000	6,100	7,800	9,400	12,100
Cape Town ...	6,100	6,400	5,700	—	5,000	2,500	6,100	7,500	5,800	7,300	10,500
Bombay ...	6,200	7,600	3,100	5,000	—	3,100	2,500	3,900	5,600	7,100	9,500
Zanzibar ...	6,300	8,100	3,100	2,500	3,100	—	4,000	5,400	5,500	7,000	
Singapore ...	8,200	9,600	5,000	6,100	2,500	4,000	—	1,400	5,000	4,200	7,700
Hong-Kong ...	9,700	11,000	6,500	7,500	3,900	5,400	1,400	—	6,400	5,600	5,800
Melbourne ...	11,000	10,300	7,800	5,800	5,600	5,500	5,000	6,400	—	1,500	7,300
Wellington ...	11,000	8,900	9,400	7,300	7,100	7,000	4,200	5,600	1,500	—	6,500
Vancouver ...	8,600	6,000	12,100	10,500	9,500		7,100	5,800	7,300	6,500	—

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SKETCH MAP OF THE MEDITERRANEAN
Shewing the Principal Naval and Air Bases
of the U.K., France and Italy

CHAPTER XVI

COMMUNICATIONS IN THE MEDITERRANEAN SEA AND THE INDIAN OCEAN

1. The Mediterranean

THE MEDITERRANEAN ROUTE.

Liverpool to Gibraltar	1,343 miles.
Gibraltar to Malta	980 „
Malta to Port Said	940 „

THE strategic and economic importance of India has made this route the most carefully protected, as it is the most used, of all the Commonwealth sea lines of communication.

From the early days of history the Mediterranean has occupied an important place in world history. Around its shores the Empires of Greece and Rome rose and fell, and during the Middle Ages the prosperity of the Italian trading cities was based upon it. The discoveries of Columbus caused a decline in its trading importance, but this was rapidly recovered on the opening of the Suez Canal, through which an average of 30,000,000 tons of shipping passes annually, over 50 per cent. of which is British.

Nor has this sea been of less importance politically and strategically than commercially. France, Italy, Greece, Yugo-Slavia, Turkey and Egypt all have open access to its waters, and round its shores France, Italy and Spain have developed large overseas territories.

Strategically, the Mediterranean gives access to the Atlantic, the Indian Ocean and the Black Sea. In the Mediterranean three continents meet, and it has been on its southern and eastern shores that the beginnings of the revolt of the eastern races against the West has taken place.

For two centuries Gibraltar at its western end played a dominant part in the wars with Spain and France, separating as it does Carthage from Cadiz and Toulon from Brest. During the period of struggle with France for the control of India, Egypt at its eastern end became a French base for operations against India, to offset which Malta was seized and has subsequently been retained by Great Britain as a Mediterranean naval base, while on the Cape route Mauritius and Ceylon were held for a similar purpose. In the same way British fears of Russian expansion against India and the Turkish Empire led to the acquisition of Cyprus and to a

determination on the part of Great Britain to uphold the integrity of the Empire of Turkey, whereby most effectively the access to the Black Sea could be maintained. Following the entry of Turkey into the General War as an ally of Germany, an attempt was made to force the Dardanelles to secure access to Russia. The Dardanelles have since the Treaty of Lausanne become demilitarized and rules have been laid down for preserving the freedom of the straits in peace and war. These rules are applied under the auspices of the League of Nations by representatives of the principal Powers interested.

Problems of the Mediterranean.

It has often been said that the Balkans are the powder magazine of Europe, and the rivalries of these lesser states, combined with those of the Great Powers bordering upon this sea, have always given the Mediterranean great political and strategical importance.

Post-war conditions have caused considerable changes in both the political and strategic conditions and problems of the area. These will be considered in relation to each of the principal Mediterranean Powers.

France.

The Anglo-French Entente which ended the long rivalry between Great Britain and France radically altered the balance of power in the Mediterranean. All the most powerful British ships were withdrawn and the control of the sea was handed over to France. This situation has now changed. Relieved by her success in the General War from pre-occupation with Germany, and by the latter's total exclusion under the provisions of the Treaty of Versailles from Moroccan affairs, France has concentrated her efforts upon her African possessions. French colonial administration now extends from Bizerta to Agadir, the total area of French possessions in Africa being 4,000,000 square miles with a population of 44,000,000; Algeria is, however, an integral part of France.

These possessions supply valuable raw materials and provide sheltered markets for French manufactured goods.

France also looks to this area to recover the balance of a falling birth-rate. From Algeria alone nearly 200,000 men were enrolled in French regiments and 100,000 served as non-combatants during the war. The French colonial army including the Foreign Legion numbers approximately 160,000.

The building of a French trans-Saharan railway from Oran to the Niger basin, with branches stretching to the Atlantic coast and the Gulf of Guinea linking up with lines already in operation from Dakar and Konakry in Senegal and French Guinea, and Bingerville on the Ivory Coast or eastwards to the Lake Chad

area, will enable France to draw upon her reserves of man-power in these areas and provide safe land transit to the nearest points to home ports. The protection of these sea lines of communication between North Africa and southern French ports is therefore of first-class importance.

The distances from Algeria, Oran and Bizerta to Marseilles are 400, 530 and 436 miles respectively, and it should be noticed that these lines cut directly across British lines of communication between Gibraltar and Malta.

It is for the protection of these routes that the French have greatly increased the size and number of their submarines and propose an increase in their 10,000-ton cruisers.

It will be seen, therefore, that in the event of hostilities in this area between Great Britain and France the conflict would take the form of intensive efforts to break the lines of communication.

In a war of this nature the advantage lies with France, whose communications are easier to protect and whose need of overseas traffic is not so urgent as is that of Great Britain, and the more so since a war between the two countries would be mainly a conflict at sea or in the air, in which event France would not need to draw to such an extent upon her overseas African population as she was compelled to do in the last war, while Great Britain's dependence upon raw materials from overseas is enormously increased.

The principal French naval bases in the Mediterranean area are Toulon, Corsica, Bizerta, Algiers and Oran.

The air stations are:—

The Mediterranean Theatre.

Section A: Headquarters, Toulon. Sub-sections at Marseilles, Toulon, Nice, Corsica.

Section B: Headquarters, Bizerta. Sub-sections at Sfax, Bizerta, Bone, Algiers, Oran.

Italy.

The position of Italy has also undergone marked change since the General War.

The rectification of the northern boundary by the elimination of the Austro-Hungarian Empire has freed her to follow an expansionist policy.

Italy possesses a large and rapidly growing population, and her native resources, though recently largely developed, are inadequate to her needs. Before the war Italy lost, by emigration to other countries, very large numbers of her population, and to prevent this loss she has followed an active policy for the development of her North African possessions in Libya and Cyrenaica. Italian territory stretches from the Bay of Sollum to the border of French Tunisia and southwards to approximately parallel 22° N.

The French occupation of Tunisia in 1881 deprived Italy of a productive area which lies closely adjacent to her. Italian colonial policy may, also, aim at expansion in Asia Minor, particularly in the hinterland of Adalia, which is capable of considerable agricultural development. The island of Rhodes offers a suitable "jumping-off" ground for any operations in this area.

For the realization of this policy of expansion Italy must effectively guard her sea lines of communication, and she has also announced her intention of maintaining a naval standard not inferior to that of any other continental Power having Mediterranean interests. In general terms the result of the General War has transferred the sovereignty of the Adriatic from Austria-Hungary to Italy, though the newly-created state of Yugo-Slavia is not entirely willing to let this sovereignty pass by default.

It should be noted that the expansionist policies of France and Italy have led to considerable divergence of views between these two Mediterranean Powers,* particularly regarding the French occupation of Tunisia and the treatment by France of Italian settlers in French colonies in Africa.

Italian feeling is that with an expanding population, as against that of France which shows a steady decline, she did not receive by the Versailles Peace Treaty the territory to which her efforts entitled her.

The principal Italian naval and air stations in the Mediterranean are:—

Maddalena (Sardinia); Castellamare (Naples); Messina (Sicily); Brindisi, Porto Lago (Rhodes); Tripoli.

Great Britain.

The position of Great Britain in the Mediterranean has, also, undergone considerable change. Her interests are mainly concerned to preserve the *status quo* and to secure lines of communication to India. The change in the general European situation noted above as affecting France and Italy has compelled Great Britain to maintain a naval standard not inferior to the combined fleets of these two Powers.

The grant of independence to Egypt, though British troops and air forces still remain in that country, has changed the position and the previous control has been modified against the advantage of Great Britain.

The mandates for Palestine and Trans-Jordan serve to protect the northern flank of the Suez Canal, but it cannot be considered that British responsibilities in the eastern area of the Mediterranean

* It is stated that a considerable measure of agreement has recently been reached between France and Italy upon naval programmes. These questions, left outstanding from the London Naval Conference (1930), had been a source of embarrassment to Great Britain *vis-à-vis* the United States, with whom and with Japan only naval accord had been reached in London in 1930.

have been lightened since, in addition to the already existing need for the protection of sea communications, has been added the defence of communications by air. The establishment of a strong Italian air force in the neighbourhood of Sollum Bay might constitute a dangerous threat to shipping in transit through the Suez Canal.

By reason of its general shape the Mediterranean presents a difficult strategic problem for Great Britain.

It is nearly 2,000 miles long in an east to west direction and roughly 500 miles wide in a north to south direction, and though it is divided into a western and an eastern section by the narrow channel between Cape Bon and the island of Sicily, it is clear that upon Great Britain lies the onus of protecting the greater length within the narrower sailing limits of those lines of communication which lie within close range of the submarines or aircraft of other Powers who possess the shorter lines between their colonies and their home ports with wider limits within which to sail.

The great average depth of the Mediterranean operates both for and against the submarine. With only 13 large and small submarines in this area, German and Austrian vessels were able to sink in the eighteen months ending January, 1917, a total of 441 allied and neutral vessels. Minefields to produce their maximum value must be laid in shallow water, and these areas only exist off the coasts of Europe and Africa where their laying would be difficult of accomplishment by British vessels. A minefield could, also, be laid between Cape Bon and Sicily, though this would not operate to marked advantage to Great Britain, save in the defence of Malta, which is, however, more likely to suffer from attacks from the air than from the sea.*

The Mediterranean route is, also, peculiarly susceptible to attack from the air, since both shipping and aircraft would be compelled to "run the gauntlet" between French and Italian air stations on both the European and African coasts.

BRITISH NAVAL BASES IN THE MEDITERRANEAN.

GIBRALTAR.—A rocky promontory two and half miles in length by three-quarters of a mile in width and connected by a narrow isthmus with the Spanish mainland from which it is separated by a neutralized zone.

The town stands on the north-west side of the promontory. It is a first-class harbour 440 acres in extent with three dry docks and the necessary fuelling facilities.

The opposite African coast is 14 miles distant, and thus Gibraltar could only come under fire from land in the improbable event of war with Spain.

* cf. Fayle, *op. cit.*, Vol. I, c. 3 ; Vol. II, c. 2.

Gibraltar, the headquarters of the Atlantic fleet, clearly occupies a position of the greatest strategic importance at the junction of the Atlantic and the Mediterranean. The strategic importance of Gibraltar is limited by three factors:—

- (1) Its size, which makes expansion difficult and expensive.
- (2) The international zone of Tangier, facing the fortress on the African side.
- (3) The possibilities of hostile air action.

The Government of Gibraltar, which is a Crown Colony, is vested in the Governor who is also Commander-in-Chief, assisted by an executive council.

It is an important cable station in communication with the Continent, Tangier, Eastern Mediterranean ports and the United Kingdom.

MALTA.—The island group of which Malta, 95 square miles, and Gozo, 26 square miles, are the most important, occupies an important strategic position in the centre of the Mediterranean, being roughly equidistant from Port Said and Gibraltar and from Messina and Cape Bon.

It is one of the most important ports of call in the world, and is the base and headquarters of the Navy in the Mediterranean. The principal harbour, Valletta, the finest repair dock outside the British Isles, is heavily fortified and provides first-class fuelling, cable and wireless facilities. Troops stationed at Valletta, also constitute local reinforcements for the Middle-Eastern Area.

Its value as a first-class repair station capable of taking the largest ships is obvious in the event of hostilities in the Mediterranean area. It is, also, until the Singapore base is complete, the nearest dry dock for all ships serving east of the Suez Canal, though the distances to be covered from the Pacific area exceed 7,000 miles in certain cases. Malta is also an important air station, particularly so in relation to co-operation with the Navy.* R.A.F. units stationed at Malta are:—

No. 202 (Flying Boat) Squadron: Calafra.

R.A.F. units with H.M.S. *Eagle*.

CYPRUS.—The island of Cyprus, 3,500 square miles in extent and situated 240 miles from Port Said, occupies a position of lesser importance in the Mediterranean, but sufficient to render it of considerable value to any other Power. The port of Famagusta is modern and important. The island is unfortified. The position of Cyprus, off the coast of Asia Minor, might give it considerable importance in the future as an air station, in which connection it will be mentioned later.

* For details of the distribution of the Fleet, reference should be made to Chapter V.

2. The Canal Zone.

Port Said to Aden, 1,310 miles.

The importance of this area has already been noticed in discussing the importance of Egypt in the general scheme of Commonwealth defence.

It is sufficient here to notice that it is the intersecting point of both the land and sea axes of the Empire, and as one of the most important junctions for Imperial communications by air the general importance of the area tends to increase. The difficulties of protecting this area are increased by the development of aircraft.

3. The Indian Ocean.

THE INDIAN OCEAN ROUTES.

Aden to Bombay	..	..	..	..	..	1,600 miles.
Aden to Colombo	..	..	..	..	..	1,092 "
Aden to Karachi	..	..	..	..	..	1,470 "
Aden to Zanzibar	..	..	..	..	..	1,720 "
Aden to Freemantle	..	..	..	..	..	4,970 "

Passing down the Red Sea past the Italian colony of Eritrea and French Somaliland, the Indian Ocean routes all converge upon Aden.

ADEN is a fortified fuelling station now controlled by the Air Ministry. The interests of Great Britain in Aden and the surrounding areas of the Arabian peninsula have been noted elsewhere. Aden is completely devoid of any amenities, being little more than a volcanic peninsula; drinking water is obtained by condensation. (See also Chapter XIV.)

Perim, in the strait of Bab-el-Mandeb, stands about one and a half miles off the south-west corner of Arabia. It possesses a good harbour with coaling facilities and is also a cable station.

Socotra, lying 150 miles to north-east of Cape Guardafui and on the direct route to India, is under British protection. It is held to prevent its passing into other hands. British protection is, also, extended to Somaliland for similar reasons.

Problems of the Indian Ocean.

Such problems as exist in this area may happily be said to be purely domestic. By the Treaty of Versailles, Germany, the only strong naval Power in this area, has now been totally excluded.

Great Britain holds all possible entrances into, and exits from, this ocean, if the approaches through the Dutch islands be excluded.

Aden in the west, Singapore in the east, guard the northernmost entrances, while in the south Freemantle and Simon's Town are fortified bases at the only two turning points into the ocean.

The granting of the mandate over German East Africa to Great Britain has made the western border of the Indian Ocean practically entirely British, the only exception being Portuguese East

Africa. Portugal is almost a non-military country and has constantly maintained friendly relations with Great Britain, particularly so in regard to the important port of Delagoa Bay, which she has agreed shall pass to Great Britain should she have no further use for it.

Any approach to British possessions on the west coast of the Indian Ocean is practically impossible, as large forces could not penetrate the dense tropical jungles of the Congo or the deserts of the Sahara. In the north-west lies French Somaliland, but this could not be held in force as a base for an attack upon sea communications. The tribes in the south of the Arabian peninsula are in treaty relations with Great Britain. The British mandated area of 'Iraq effectively prevents any approach to the Indian Ocean from Russia, and the southern seaboard of Persia has with the development of imperial air communications become a sphere of British influence. On the eastern side the forests of Burma and the fortified base of Singapore afford adequate protection.

The French island of Madagascar threatens lines of communication between Durban and Colombo, but is flanked by the British possession of Mauritius. Madagascar could, if necessary, be blockaded and reduced, as any sea communications between it and home ports could easily be severed.

The security of the Indian Ocean is designed to uphold the safety of the great Indian peninsula, which is not only the keystone of the defensive arch, but is the permanent factor in the general political stability of the Far East.

So long as the North-Western Frontier is strongly held and adequate means established to prevent internal disorder, India is able to fulfil her dual rôle mentioned above.

The principal naval base in India is Bombay.

Bombay, possessing the finest harbour in India, is the headquarters of the Indian navy, and is centrally placed both from the point of view of internal and external communications. Two separate railway systems, the Bombay, Baroda and the Great Indian Peninsular, bring the port into contact with Madras, Calcutta, Allahabad and Delhi. As regards external lines of communication, it is practically equidistant between Aden and Rangoon, between Durban and Freemantle, and between Mombasa and Singapore. It forms, therefore, the most convenient base for operations in the Far East, since India is the training ground for a large part of the British forces, and is also in a position to supply the needs of a large expeditionary force.

Colombo, on the west of the island of Ceylon, a fortified fuelling base, flanking the routes from Aden to Calcutta and Singapore and from the Cape to Calcutta, occupies an important strategical position which aircraft appear likely considerably to increase.

Singapore need only be mentioned here, as its importance is discussed in the chapter dealing with the Pacific, but it is clearly the assembly point for naval forces operating in Indian and Pacific waters, much as Gibraltar is an assembly point for the Mediterranean and Atlantic fleets.

Other important points in this area which do not call for detailed description are:

In India:—

Madras	} Fortified fuelling stations.
Rangoon	
Calcutta	

In the Indian Ocean:—

The Seychelles—Cable station.

On the African Coast:—

Mombasa—Cable connection with Zanzibar.

Zanzibar—Cable connections with Europe.

Air Defence in the Indian Ocean.

With all the focal points in the Indian Ocean in British possession, the part likely to be played by air forces in this area appears to be by way of relieving the naval forces of the duties of watching focal points, the guarding of convoys and reconnaissance.

The following squadrons are stationed in the Indian Ocean area:—

Aden: No. 8 Bombing Squadron.

Basra: No. 203 (Flying Boat) Squadron.

Singapore: No. 205 (Flying Boat) Squadron.

Flying boats, based upon Basra, Colombo and Singapore, could effectively police the large areas in their proximity, and by reason of the good visibility of the area and the greater range of aircraft could relieve naval forces of reconnaissance and patrol duties.

The Seychelles Islands, approximately 1,700 miles equidistant from Durban and Bombay, and the Cocos Islands, the same distance between Colombo and Freemantle, and 2,200 miles from each other and lying nearly in the same parallel of latitude, could be utilized for patrol and reconnaissance duties in the centre of the ocean.

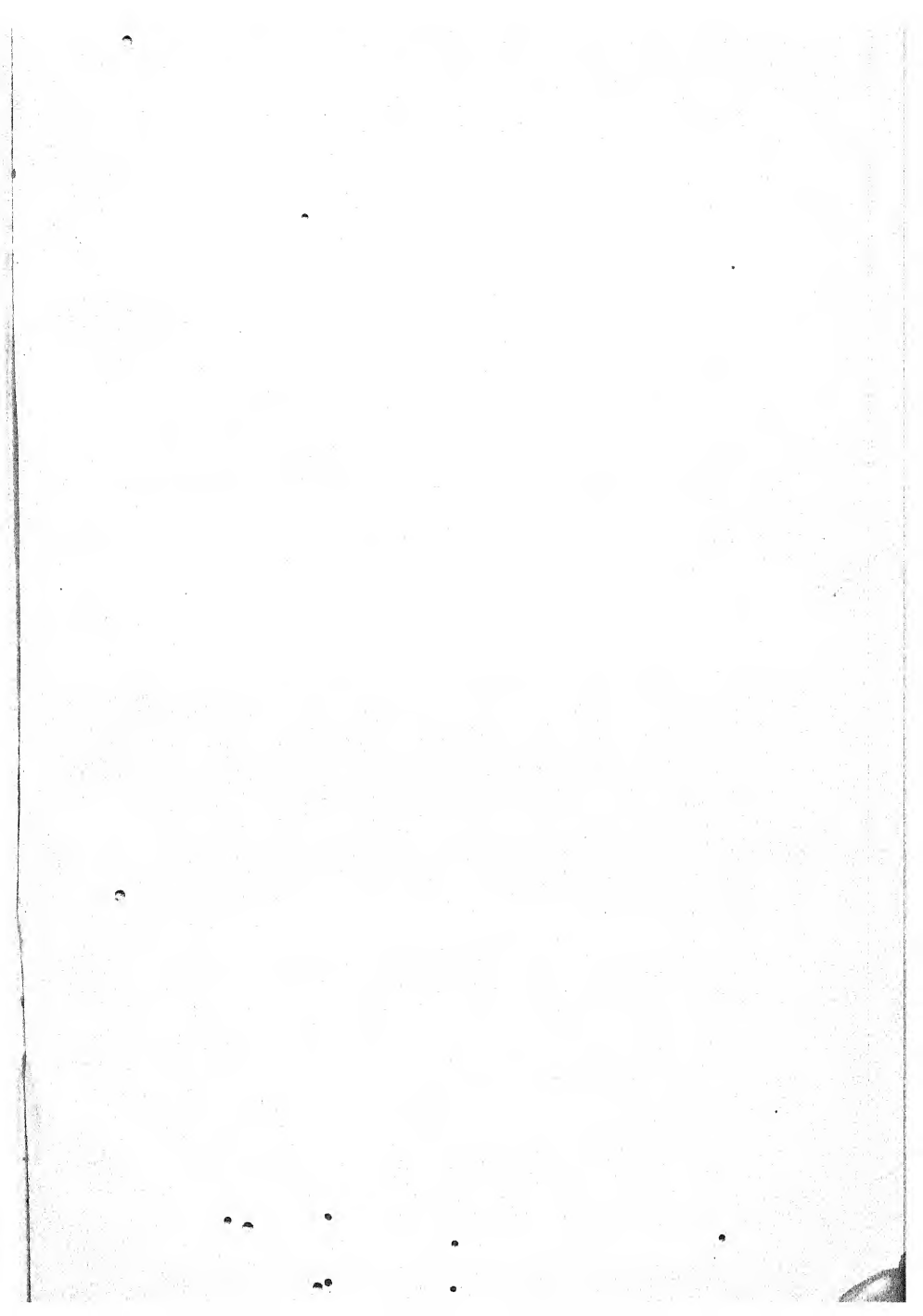
The port of Zanzibar, separated from the mainland by a distance of about twenty-two miles, or Kilindini (Kenya Colony) are suitably placed for flying boats. From either of these centres effective control and reconnaissance could be carried out. The two ports, however, being close to the equator would be unsuitable for permanent European occupation.

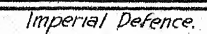
The particular value of aircraft in reconnaissance and patrol duties will be realized when it is recalled that no less than fifteen light cruisers were required to locate and bring to action the German cruiser *Emden* which was at large in Indian waters at the outbreak of the last war.*

* For a full account see *Faule, op. cit.*, Vol. I, cc. 7 to 15.

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CHAPTER XVII

COMMUNICATIONS IN THE PACIFIC OCEAN.

SEVENTY-FIVE years ago it was said that "the Pacific Ocean, its shores, its islands, and the vast region beyond will become the chief theatre of events in the world's great hereafter. Henceforth European commerce, European politics, European thought, and European connections, although actually becoming more intimate, will, nevertheless, relatively sink in importance." Nor is it improbable that in time this prophecy will be fulfilled.

A globe will show that the Pacific is ringed by four continents containing approximately two-thirds of the entire human race, and though these peoples are separated from each other by vast distances, their intercourse has rapidly increased during the twentieth century. The Panama Canal, providing a new eastern gateway into the ocean, has not only played a predominant part in opening up the intercourse between the Pacific peoples, but it has revolutionized the position of America.

Since the opening of the Canal, North America has become an island 3,000 miles from Europe, 1,500 miles from South America and 4,000 miles from Asia, and occupies, therefore, relative to the other two great sea Powers of the world, Great Britain and Japan, a position of greater sea centrality.

Projects for the construction of a canal uniting the Atlantic and Pacific Oceans had occupied public attention since the seventeenth century, but serious work began only when a company was formed in France under the leadership of Ferdinand de Lesseps, the builder of the Suez Canal. On the bankruptcy of this company, the United States bought out the concessionaires and began in 1904 the work which was concluded in 1914. Under the Clayton-Bulwer Treaty of 1850, between Great Britain and U.S.A., it was agreed that any canal should be neutral and be used on terms of equality by each nation. This Treaty was subsequently amended by the Hay-Pauncefote Treaty of 1901, it being agreed "that the Canal shall be free and open to the vessels of commerce and of war of all nations, in peace and war, on terms of equality."

The United States Navy Year Book gives the following particulars regarding the Canal:—

"The total length of the Canal from deep water in the Atlantic to deep water in the Pacific is 50 miles; the length on land is 41½ miles. In making the passage from the Atlantic to the

Pacific a vessel first enters a channel in Limon Bay, follows this for a distance of 7 miles to Gatun, and there, entering a series of locks in three flights, is raised 85 feet to the level of Gatun Lake. Through this lake the vessel can steam at full ocean speed, keeping to a channel which varies from 1,000 to 500 feet in width. On reaching Bas Obispo, 24 miles from Gatun, it passes into the Gaillard Cut, and steams through this defile for 9 miles to Pedro Miguel. There it enters a lock, and is lowered thirty and one-third feet to a small lake at an elevation of fifty-four and two-third feet above sea level. Traversing this lake for about one and a half miles to Miroflores, it enters two locks in series and is lowered to sea level, passing out into the Pacific through a channel about eight and a quarter miles in length, with a bottom width of 500 feet. The depth of the approach channel on the Atlantic side, where the tidal variation does not exceed one and a half feet, is 41 feet at mean tide; and on the Pacific side, where the maximum variation is 23 feet, the depth is 45 feet at mean tide."

The cost of building the Canal was £75,000,000 in round figures. This does not include the fortifications, on which, up to the present, a total sum of £7,382,000 has been expended.

The military protection of the Canal apart from the actual defences *in situ* is bound up with the siting of U.S. naval bases in the Caribbean Sea and the Gulf of Mexico. These areas, though in the Atlantic, derive their main strategic value from their influence upon the Canal. The approaches to the Canal from the Atlantic are as follows:—

- (1) Florida passage between the mainland and the island of Cuba.
- (2) Windward passage between the island of Cuba and Haiti.
- (3) Mona passage between the islands of Haiti and Porto Rico.
- (4) The south-east passage between the island of Trinidad and Barbados.

It can be seen that, with the exception of the last named, all the approaches to the Canal are flanked by U.S.A. naval stations—Key West, Guantanamo, Culebra and St. Thomas.

The effects of the opening of the Canal upon the sea communications of the world have been profound, as is shown by the tonnage transported, which has increased from 4,800,000 tons in 1915 to 30,000,000 in 1930, of which 50 per cent. was American and 25 per cent. British. It has been further calculated that this traffic in another fifteen years will total 135,000,000 tons.

From the point of view of Great Britain, the effects are most felt on the route to New Zealand and the western coasts of the Americas. Taking the length round the South American continent as 5,500 sea miles, the gain to ports to the south and north

of Panama is clear. New Zealand is brought approximately 1,000 miles nearer to Great Britain.

These gains in mileage are offset to a considerable extent by the lack of ports of call, the number of which upon ocean routes largely determines their value.

The rapid development of Vancouver (British Columbia) during recent years is due to the opening of the Panama Canal. During the year 1929 40,000 ocean-going and coast-wise vessels entered and cleared the port.

Vancouver exports in increasing quantity the agricultural produce of the prairie provinces which was formerly shipped from the Atlantic or St. Lawrence ports. Wheat grown west of Regina can be shipped to Liverpool cheaper from Vancouver than from Montreal, since, sea transit being about ten times cheaper than rail transit, the longer sea voyage is cheaper in the long run.

When conditions in China settle down and normal trade relations are resumed, the importance of Vancouver as the Pacific outlet for Canada's Far-Eastern trade will expand at a rapid rate, as it is distant only 6,000 and 5,250 miles respectively from Hong-Kong and Shanghai.

Considerable as are the commercial advantages to Great Britain derived from the opening of the Canal, the strategic gains are much open to doubt. British commercial interests in the Far East are at least as important as those of the U.S.A.,* while her military responsibilities—New Zealand, Australia and Canada as against the Philippines—are unquestionably heavier. It cannot therefore be a matter of indifference to the Commonwealth that the Canal has allowed the U.S.A. to concentrate half her fleet in the Pacific and to be able to concentrate the whole in the same waters in a relatively short space of time.

As was shown in discussing the change over in the balance of power in the Caribbean, the Canal could only be of use to this country in the event of the neutrality or active co-operation of the United States of America, in which latter case the naval defence of the Western Pacific would be entrusted entirely to that Power,

In the event of a war with Japan, the Canal route to the Far East would be longer than either the Suez or Cape of Good Hope routes and less well furnished with ports of call and at considerable distances from any of the Commonwealth bases; these disadvantages are offset by the fact that opportunities for submarine and mine-laying activities are much reduced by the vast areas covered by the Pacific. In the event of a war between Great Britain and the United States of America, the Canal would be closed to British vessels by the land batteries and air defences of the Canal zone itself.

* cf. Fayle, *op. cit.*, Vol. I, cc. 6, 8, 9, 12 and 13.

In general terms, apart from the necessity of protecting the western seaboard of Canada, British interests are more concerned with the protection of the lines of communication with Australia and New Zealand, which can, however, be more conveniently guarded by naval forces based on Singapore.

Commercially, the beneficial effects of the Canal to the United States are even greater than in the case of Great Britain. Distances from New York to ports on the west coasts of Northern and Southern America are reduced by approximately 9,000 and 5,000 miles respectively.

Apart altogether from her acquisition of the Philippine Islands, the Canal has given the United States of America increased interests in the Far East. The industrial areas on the Eastern seaboard of America are brought nearer to Far-Eastern markets than before, and in the cases of Wellington (New Zealand) and Sydney, New York is now much closer than is Liverpool. Within the first ten years of the opening of the Canal U.S.A. trade with Australia showed a gain of 10 per cent. and with New Zealand 5 per cent. These figures are the more remarkable in view of the high preferential tariffs in favour of British manufactured goods granted by these Dominions.

The rapid progress in the industrialization of the Mississippi Valley will be further assisted by the provision of a natural outlet through the Caribbean ports and the Canal to the western coasts of South America and the Pacific regions, in which area American trading interests generally show increasing expansion; and these, while as yet but a small fraction of the total American exports, represent an important part of the commerce of the countries concerned. In 1924 the U.S.A. provided the following percentages of the total imports of the following countries:—

Japan	..	..	27 per cent.	China	..	..	18 per cent.
Australia	..	..	24	„	New Zealand	..	15
Philippines	..	..	60	„			

The Canal will have further marked effect upon the distribution of the population of the U.S.A. and Canada. The following figures illustrate the relative density of populations on the two coasts:—

<i>Population per Square Mile.</i>			<i>Population per Square Mile.</i>		
Nova Scotia	..	25	British Columbia	..	1.5
Georgia	..	492	Washington	..	24
Rhode Island	..	478	California	..	20

This redistribution will not only affect the trade routes, but will create further defence problems.

Strategically the Panama Canal is as vital an artery to the United States of America as is the Suez Canal to Great Britain, with the difference that the Panama Canal is entirely the property of, and is controlled and administered by, the U.S.A.

The defensive fortifications are most elaborate and are stated to be entirely adequate not only for the protection of the Canal and its zone but for the fleet when deploying from the Canal approaches. In addition, the Atlantic approach is protected by the ring of the Caribbean Islands and at the Pacific end by the immense distances that an attacking force would have to cover before reaching their point of attack. The lack of effect of naval gunfire against land fortifications is also well known.

Problems of the Pacific.

It has already been noted that the Pacific is ringed by four continents containing upward of two-thirds of the human race, a very large percentage of whom are still culturally and politically backward, but who possess natural resources both agricultural and mineral in great abundance. It is, therefore, certain that in time the contacts between themselves and the world at large, though at present retarded by the great spaces of the ocean* which separates them, will increase. In this opening up of the area the U.S.A., Great Britain and Japan are vitally interested, as will, also, in time, be Russia.

On the eastern side of this ocean lies the U.S.A., the most highly industrialized country in the world, already seeking world markets for her manufactured output and shortly unable to satisfy from within her own territories her needs in the raw materials of industry and food. American trade within this area already exceeds three thousand million dollars annually.

American influence and control in the Pacific began when Hawaii, Tutuilla (Samoa), the Philippine Islands and Guam were annexed in 1898. Since that date American influence has been greatly increased by the control of Nicaragua and Panama and the construction of the Panama Canal.

American troops took part in the suppression of the Boxer Rising, and the policy of the "open door" in China has always received American support. Within recent years the U.S.A. has, in response to the demands of the Pacific coast settlers, totally forbidden Asiatic immigration into America. This policy has been a cause of offence to the Japanese.

British interests in the Pacific are concerned primarily with the protection of India and the safeguarding of sea communications with Australia and New Zealand. The possession of India has

* See Appendix A. The total area of the Pacific Ocean is 64,000,000 square miles

shaped British policy in the Pacific—notably in the Japanese Alliance which was designed to offset the Russian menace to India.

Apart from these two main considerations, British interests in the Pacific generally are commercial. British capital has been largely employed in the development of the Chinese railways, ports, etc. Approximately 40 per cent. of the total carrying trade between China and foreign ports is in British ships. British trade with China passes to the southern provinces through Hong-Kong; to the Yangtse Valley through the Shanghai international settlement; to the northern provinces along the Tientsin-Peking Railway.

Leading British oil interests are also closely interlocked with those of the Dutch, and an understanding is also under consideration between these two countries for the control of the rubber and tin-mining industries.

The maintenance of the balance of power in the Pacific and settled conditions for trade may be taken to indicate the best interests of Great Britain in the whole Pacific area.

The rise to world power on the part of Japan has been the outstanding fact in the history of the Pacific during the last half of the nineteenth century. Of this rise to world power Dr. Bowman says in "The New World":—*

"It was in 1853 that the United States Government sent Commodore Perry with an American fleet, demanding Japanese protection for American sailors and property wrecked on the coast, and permission for American ships to use Japanese ports as a base for food or for trade. The Perry expedition forced Japan into the current of modern international life.

"After 1868 Japan modified her political and social institutions in what is probably the most complete and radical change of its kind that has ever occurred in the world's history. The basis of Japanese social and military organization had been feudalism. In 1868 the system was abolished by revolution, and a national spirit sprang up that was to be used as a powerful instrument in empire building. The first railroad was begun in 1870; to-day there are nearly ten thousand miles of rail. In 1872, military service became universal and obligatory. A constitution was granted in 1889, and Parliament met for the first time in 1890.

"It was just in the midst of this process of modernization that Japan consolidated her island possessions. In 1875 she got from Russia the Kurile Islands, thus rounding out her domain to the north. In exchange she relinquished her claim to the island of Sakhalin, the southern half of which was again recovered in 1905; the northern half is occupied at the present time. In 1876 she seized the Liukiu Islands, which extend southward almost to

* By permission of Messrs. Harrap.

Formosa. In 1895 as a result of her war with China she won Formosa, the richest of her island prizes, with a population of 3,650,000. Her island empire fringes the coast of Asia for 3,000 miles and embraces an area of 261,000 square miles."

As a result of a successful war against Russia in 1904-5, Japan acquired Port Arthur and the Liao-Tung Peninsula, the southern half of the island of Sakhalin and predominant interests in Manchuria and Korea; these acquisitions securing for Japan a position of the greatest strategical strength. This territorial development was accompanied by as noteworthy a growth in the internal resources of the country. Within sixty years over 10,000 miles of railway have been constructed; Japanese merchant shipping totals two and a half million tons. Iron and steel industries have grown at an enormous pace. "Every resource of diplomacy, of industry, of financial power and technique has been organized to penetrate the trade areas of the Orient."

This industrial development is the more remarkable since Japan is handicapped by lack of the essential raw materials of industry. It is the desire to overcome these deficiencies and to procure suitable outlets for her expanding population which has necessitated a policy of Japanese expansion—first, to the mainland and into China; and, secondly, an expansion southwards into the Pacific. This former policy, typically exemplified in the twenty-one demands to China, has aroused the opposition of the other Powers interested in China, and is in the second case a cause of disquiet to Australia and New Zealand and America.

The last three countries and Canada have also passed legislation to exclude Asiatics. This is a source of irritation to Japan, who has a population of nearly 350 to the square mile as compared with 1 to the square mile in Australia or 3 in Canada.

In comparison with the great industrial nations of Europe, who possess large supplies of iron and coal, Japan is seriously handicapped, and she looks to China to satisfy these needs, and to find in that country outlets for her manufactured goods. Japan is therefore more vitally affected than any other Power in the affairs of China, and feels bound to miss no opportunity of advancing her position. She is thus brought into keen rivalry with the other European Powers and America.

It should be noted, too, that, unlike most of the European nations, Japan has few colonial possessions to which she can export her surplus population and yet retain these emigrants as a source of economic or strategic strength. Even when Japanese immigrants were admitted into foreign countries they were lost to Japan, but now that Asiatic immigration is forbidden by the Dominions of Australia, New Zealand and Canada and by America, Japan's case is that she not only suffers an acute economic disability but that an affront is put upon a great Power.

The paralysis of Government in China has contributed to the general difficulties of the position in the Pacific.

Various attempts, mainly misdirected, have been made to overcome the general inertia resulting from lack of efficient communications and the stultifying effects of the age-old educational system of China. Since the revolution of 1912 which swept away the Manchu Dynasty, China has had no settled Government, save for a temporary period under an able dictator, Yuan Shi Kai. Since his death in 1916, competing war lords have used their powers to divert the public resources from Peking to their own uses. The entry of China into the General War only served to provide these competing generals with further opportunities to equip their forces with the arms and munitions furnished to China by the Allies, and by 1919 nearly one and a half million men were under arms. After the war the Canton nationalist forces, strongly backed by Russian influence and anti-foreign in opinion, secured a position of dominance and threatened the safety of the foreign settlement at Shanghai. While prepared with the other Powers to safeguard her interests, Great Britain offered to negotiate with the two warring factors, the North and the South. Further disagreements between the two parties prevented any settlement with Great Britain and the other Powers.

Further fighting resulted in the triumph of the North and the resignation of General Chiang Kai Shek of the Nanking Government. Steps were taken to unite the Governments of the North and South, and a united Nationalist Government was set up at Nanking in 1929. Chiang Kai Shek is now the first President of the Republic of China.

The position of Russia, like that of China, is obscure. Mongolia is now an independent self-governing republic in alliance with the Soviet Government, and it seems not likely that the Soviet will allow the control of Southern Manchuria to pass without a challenge to Japan, nor does it seem that the Soviet need of an ice-free port on the Pacific coast is less than under the Czarist rule.

It will be seen, therefore, that during the years immediately following the war there existed several causes leading to unsettlement, the principal of which were as follows:—

- (a) The elimination of Russia and Germany had upset the balance of power in the Pacific, leaving three Powers only dominant therein. The Anglo-Japanese Alliance which was at that time still in existence was naturally suspect in the United States, especially in view of the Japanese "21" demands to China, which appeared to indicate a definite purpose on the part of Japan to secure a predominant position in China.

- (b) The general chaos in China and the effects of Bolshevik action in that country.
- (c) The irritation of Japan at her failure to secure the insertion of a clause into the Versailles Treaty allowing her the principle of unrestricted emigration, and the restrictive laws against Asiatic emigrants passed by the various Pacific Powers.
- (d) Under the provisions of the Versailles Treaty the German possessions in the Pacific were allotted as Mandates to Japan and Great Britain—
 - North of the Equator to Japan: The Ladrone, Caroline, Marshall and Pelau groups of islands.
 - South of the Equator to the Commonwealth: The island of Nauru.
 - South of the Equator to Australia: The German portion of New Guinea and neighbouring islands.
 - South of the Equator to New Zealand: Western Samoa.

Though, under the terms applied by the League of Nations to all mandated areas, the nations concerned pledge themselves to hold these possessions as a trust for the native inhabitants, not to fortify them and to allow equal facilities for trade to other nations, the result of the disposal of these ex-German territories created alarm in America and Australia. The islands allotted to Japan are interposed between the American naval base at Hawaii and her most eastern and important possessions, the Philippine Islands. Many of these islands could be suitably employed as submarine bases, though in general the Pacific is not, owing to its depth, suitable for this form of warfare. In particular, American attention is also directed to the fact that her advanced naval base at the island of Guam is surrounded by a cordon of possible submarine bases, and also that the island of Yap, in the Pelau Group, is a highly important link in the American Commercial Cable Company's line from San Francisco, Hawaii, Midway, Yap and Manila, and is in addition capable of adaptation as a submarine base threatening the Guam-Manila lines of communication. The island of Jaluit, the administrative capital of the Marshall Group, was partially fortified before the war, and occupies a position of strategic importance, being approximately equidistant from Yokohama and Brisbane.

The American Government, desiring a peaceful settlement of outstanding and difficult questions between herself and Japan, called a conference at Washington in 1922 of the principal naval Powers interested in Pacific problems. At this conference, at which representatives of China were invited to state their case, though it was doubtful whether there existed any settled

Government in that country sufficiently strong to implement any agreement arrived at, the principal contracting Powers were able not only to settle specific questions relating to the Pacific, but also to secure the limitation of certain classes of naval armaments.

The most important of the agreements arrived at were:—

That the contracting Powers should abandon their respective capital shipbuilding programmes and that future building should be for replacement only.

CAPITAL SHIPS.—The total capital ship replacement tonnage of each of the Powers was not to exceed the following: United States, 525,000 tons; British Empire, 525,000 tons; France, 175,000 tons; Italy, 175,000 tons; Japan, 315,000 tons. Substantially the same ratios were maintained in prescribing the total tonnage for aircraft carriers, the standard being: the United States and Great Britain, 135,000 tons each; France and Italy, 60,000 tons; and Japan, 81,000 tons. It was further agreed that no capital ship should be bought or constructed by the contracting Powers to exceed 35,000 tons standard displacement, and that no aircraft carrier should exceed 27,000 tons. No capital ship may have a gun with a calibre in excess of 16 inches. There shall be no reconstruction of capital ships or aircraft carriers except for defence against air and submarine attack, and then under strict limitation of tonnage and character of protection. It is provided also that there is to be no alteration in side armour, in calibre, number, or general type of mounting of main armament except in the case of France and Italy, which may increase their armour protection and gun calibre so long as they do not exceed 16 inches in the latter case.

The general effect of this clause is to fix the ratios of naval armament and provides a "naval holiday" till 1936. In the event of one of the signatories giving a two years' notice to terminate the agreement, a conference of all the parties shall be held within one year. This agreement, which does not affect light cruisers, torpedo boats under 10,000 tons or submarines, establishes Great Britain on a one-Power naval basis.*

* A further conference between Great Britain, U.S.A., France, Italy and Japan was held in London in January, 1930. Agreement was reached between Great Britain, U.S.A. and Japan fixing the tonnage of cruisers, submarines and destroyers at a maximum of 541,700, 526,000, 367,050 for Great Britain, U.S.A. and Japan in the order named. Submarines are to be limited to 2,000 tons, but each Power may build three not exceeding 2,600 tons.

France and Italy were unable to reach final agreement, but a recent announcement in the Press states that such agreement has been reached in principle and that a Treaty embodying the details is to be shortly drafted.

THE USE OF SUBMARINES.—The signatory Powers accept the principle of the prohibition of the use of submarines as commerce destroyers, as a part of the law of nations and as binding between themselves.

REGARDING WAR-FORTIFIED NAVAL BASES.—The United States, the British Empire and Japan have agreed to maintain the *status quo* at the time of the signing of the treaty with regard to fortifications and naval bases in the sense that there is to be no increase of naval facilities or coast defences. This agreement affects their respective territories as follows: (1) The insular possessions which the United States now holds or may hereafter acquire in the Pacific Ocean, except (a) those adjacent to the coast of the United States, Alaska and the Panama Canal Zone, not including the Aleutian Islands, and (b) the Hawaiian Islands; (2) Hong-Kong and the insular possessions which the British Empire now holds or may hereafter acquire in the Pacific Ocean east of the meridian 110° east longitude, except (a) those adjacent to the coast of Canada, (b) the Commonwealth of Australia and its territories, and (c) New Zealand; (3) the following insular territories and possessions of Japan in the Pacific Ocean, to wit: the Kurile Islands, the Bonin Islands, Amami-Oshima, the Loochoo Islands, Formosa and the Pescadores, and any insular territories or possessions in the Pacific Ocean which Japan may hereafter acquire.

West of the 110° meridian of longitude the *status quo* as regards fortified naval bases shall be maintained.

From this agreement islands adjacent to the coasts of Canada, Australia, New Zealand, the U.S.A. (Alaska, Hawaiian Group, Aleutian Islands and Panama Zone), and Japan, Singapore, Pearl Harbour, Nagasaki, are thereby excluded from the provisions of the treaty, but Hong-Kong, Yap, Jaluit are included.

TREATY RELATING TO CHINA.—The general effect of the various clauses affecting China was a guarantee of her territorial and administrative independence, and a modification of the Chinese customs tariffs in China's favour.

Under this treaty Wei-hai-Wei, Kwang Chow, Tsing-tau and Shantung were to be returned to China by Great Britain, France and Japan respectively. Wei-hai-Wei was returned to China in October, 1930.

It will be seen that the Washington Conference served to re-adjust the disturbance of the balance of power that had, by reason of the elimination of Germany, the disappearance of Russia, the growth of U.S.A. and Japan, and the more important status of the self-governing Dominions, Canada, Australia and New Zealand, taken place in the Pacific. It is also clear that, in so far as it was possible to do so, the interested Powers were prepared to assist China in her struggle to establish settled conditions of Government

and administration while at the same time securing for all Powers equal opportunities for trade.

Subsequent events have shown that, so far as Japan is concerned, the animosity caused by the immigration restrictions has lessened, and that Japan is undertaking a policy whereby emigration will be encouraged first to the less populated areas of the Japanese Empire itself and to those countries who may issue invitations to Japanese emigrants, as, for example, has recently been done by the Government of Brazil.

As regards China, Japan appears to have reversed the aggressive policy which the twenty-one demands envisaged. It is not, however, improbable that the restoration of a strong Government in China may lead to complications between China and Japan regarding Manchuria.

Though, as has been seen, the renunciation of the Anglo-Japanese Treaty and the general arrangements come to at Washington have ameliorated the position in the Pacific, yet the three Powers mainly interested still retain large naval forces in the area, for the accommodation of which naval bases are maintained.

In an ocean such as the Pacific, measuring some 8,000 miles north to south and nearly 10,000 across its widest part from east to west, the situation and adequate defence of naval bases is clearly of first-rate importance to the three principal naval Powers.

Great Britain.

Under present conditions Great Britain has no naval base in the Pacific capable of docking post-Jutland ships, and since under the Washington Agreement Wei-hai-Wei was returned to China and Hong-Kong may not be enlarged, Singapore and Sydney are the only two bases suitable and permissible to be so improved.

Garden Island, Port Jackson, is a first-class base and the headquarters of the Royal Australian Navy. While it fulfils an important function in the defence of Australia and New Zealand, the harbour is unfavourably placed in relation to the Pacific as a whole. In consequence it was decided to proceed elsewhere gradually with the construction of a dock capable of taking the largest capital ships.

SINGAPORE.—Singapore, acquired by Great Britain in 1819, is a small island lying at the extreme southerly end of the Malay Peninsula. Apart from its strategic position it is one of the great commercial harbours of the world, handling in 1928 68 per cent. of the export trade of the Malay Peninsula. It is connected with the mainland by a railway viaduct.

When events in the Pacific indicated that world interests in that area were not unlikely to cause unrest among the Powers primarily concerned, the relative values of a naval base either at

Singapore or Sydney were considerably in debate. Apart, however, from the fact that the climate at Singapore was generally unsuited for a great base with all its allied industries, its unique strategical position determined that in 1925 a gradual beginning should be made to bring Singapore into being as a naval base capable of handling post-Jutland ships.

A floating dock of suitable size has already been installed, and though work has on political and financial grounds been considerably reduced, the Imperial Conference of 1930 decided that the base should be completed, probably within the contract period in 1935.

Its position gives to Singapore both local and imperial strategic importance. It guards the southerly entrance to the Straits of Malacca, Penang guarding the northern entrance, and all shipping plying between India and China must pass within a mile of it.

It is, therefore, a gateway both to the Pacific and Indian Oceans, and is the natural meeting place and pivot of the fleets of the East Indian, China and Australasian stations, and it is centrally positioned with regard to Colombo, Hong-Kong and Port Darwin. Supplies of oil fuel from Burma and the Dutch Indies are available, since Sumatra and Java and Sarawak are situated 60, 500 and 300 miles distant respectively. Within a radius of 1,500 miles lie Manila, Hong-Kong, Calcutta, Rangoon and North-Western Australia. Singapore is therefore an important unit in the defence not only of British possessions in the Pacific but of India as well.

Important as Singapore is in naval defence, it will also become in the near future the air port of the Pacific and an important link in the Empire air routes to Australia.

HONG-KONG.—Hong-Kong, a naval base, and recently the headquarters of the China Squadron, is one of the greatest harbours of the world. Seawards and landwards it is easily defended, and, though not capable of docking post-Jutland ships, occupies an important strategical position flanking the Formosa channel.*

ESQUIMALT.—Esquimalt, at the southern end of Vancouver Island, is a defended coaling station and controls the shipping entering the port via the Strait of San Juan de Fuca. Supplies of hard coal are available in British Columbia. While at first sight Esquimalt appears to be unfavourably placed save for the defence of Canada itself, a "great circle" course from Panama to Yokohama passes some 1,500 miles east of Honolulu and 300 miles west of San Francisco, from which place it is about 1,000 miles distant.

It is a fortified harbour garrisoned by the Dominion defence forces.

* cf. "The Navies of To-day and To-morrow" (Acworth) for a full discussion of the relative values of Singapore and Hong-Kong.

The table given at the end of this chapter will show that the distances separating the four chief British naval bases, Singapore, Hong-Kong, Vancouver (Esquimalt) and Sydney, are all, with the exception of the distance between Singapore and Hong-Kong, over 4,000 miles.

Distances so great as these emphasize the difficulty of protecting lines of communication and indicate the necessity of the islands as "stepping-stones." Of these in the north half of the Pacific the Commonwealth is deficient.

British naval forces in the Pacific are given in Chapter V.

United States of America.

Prior to the Washington Conference, America's naval defence was based upon the quadrilateral of Dutch Harbour (Aleutian Islands), Pearl Harbour (Hawaiian Islands), Guam and Pago-Pago (Samoa).

PEARL HARBOUR (HAWAII).—Pearl Harbour is a first-class naval base containing a dock 1,000 feet in length by 138 feet in width. Accommodation for the handling of fuel oil and coal and of supplies is provided.

It is, however, stated that when the U.S.A. Pacific Fleet is at the full strength proposed, this accommodation will be insufficient.

There is a cable station of the Commercial Cable Company and wireless communication.

While Pearl Harbour is clearly a key position in the control of the North-Eastern Pacific, its value for the Western Pacific area is less obvious, since it is separated from the Philippines by 4,770 miles. It is distant from San Francisco only 2,100 miles.

The position of Pearl Harbour makes it a convenient point of assembly for a fleet or expeditionary force intended for action in the Philippines, and as a "stepping-stone" across the Pacific protecting American lines of communication from Panama, of which it is an outpost.

Over 50 per cent. of the inhabitants of the Hawaiian Group are Japanese or Chinese, and it is thought that, in the event of war between Japan and U.S.A., this might be a menace to the safety of the naval base.

GUAM.—Guam, the largest island of the Ladrone Group, lies 3,330 miles south by west of Pearl Harbour. Guam, which lies within the *status quo* area of the Washington Agreement, is stated to be from the American view point the key to the Western Pacific, being 1,500 miles from Manila, 1,550 from Formosa and 450 from the island of Yap.

Little has been done to fortify the island, and nothing can in the future be done. Midway between Guam and Pearl Harbour lies

Wake Island. Lines of communication between Pearl Harbour and Guam are liable to interruption from the Marshall Group, which is a Japanese Mandate and contains the partially fortified base of Jaluit.

DUTCH HARBOUR (ALEUTIAN ISLANDS).—Dutch Harbour off the Alaskan coast is likely to be of importance as a future naval base in view of the rich mineral resources, as yet undeveloped, of Alaska. It flanks an approach to Japan from San Francisco or Vancouver. The islands situated 2,000 miles from northern Japanese ports render it liable to lightning raids from the latter ports. It is distant from Pearl Harbour 3,400 miles.

PAGO-PAGO (SAMOA).—Pago-Pago (Samoa), the only island possession of the U.S.A. in the Southern Pacific, is a good natural harbour capable of allowing the largest ships to berth alongside the wharves. It is unfortified, and under the Washington Agreement must remain so. It is 2,300 miles from Pearl Harbour.

Relative either to Japan or Great Britain, the position of the U.S.A. in the Pacific is unfavourable in that Guam, which is held by leading American strategists to be the keystone of the Pacific, must remain unfortified.

The main consideration of American strategy in this area is the protection of the Philippines, situated nearly 5,000 miles from Pearl Harbour. Lines of communication are liable to interruption from the many islands of the Northern Pacific in the possession of Japan.

The fleet of the United States is now organized as a single unit designed to operate as such in either ocean. The principal units of the fleet actually constructed are:—

Battleships	..	..	..	18	Destroyers	..	..	..	309
Cruisers (built)	..	..	..	14	Submarines	..	..	..	122
Aircraft Carriers	..	..	..	3					

Japan.

The position of Japan relative to the continent of Asia is similar to that of Great Britain relative to the continent of Europe. The string of Japanese islands commands for nearly 3,000 miles the approaches to China and Siberia.

Southwards the island of Formosa and the Pescadores guard the entrance to the Yellow Sea and mask the approaches to the British base at Hong-Kong, and, being only 500 miles from the Philippines, would constitute an admirable base for an attack upon that group.

YOKOSUKA.—Yokosuka, the oldest and most important docks and naval base in Japan, lies on the Sagami Nada, a land-locked

bay, on the Pacific coast. Since the Russo-Japanese War it has been greatly enlarged and is capable of handling the largest battleships afloat.

KURE.—Kure, on the Inland Sea, near Horishima, is capable of handling the largest ships. Egress both to the Sea of Japan and the Pacific is possible. At Kure are the State factories for the production of the heaviest ordnance and mountings and armour plate.

SASEBO.—Sasebo, on the island of Kyushu, near Nagasaki, occupies a position of great strategic importance. Ships of the Dreadnought type can be accommodated. The yard specializes in light cruisers and submarines.

MAIDZURU.—Maidzuru is situated on the Gulf of Wakasa, on the Sea of Japan, in close proximity to Osaka, and possesses excellent railway communications with other industrial centres. For repair work, ships of the Dreadnought class can be docked.

Smaller yards are situated at Port Arthur, Chinkai (Korea), on the mainland and at Bako (Pescadores).

In addition to these State-owned dockyards, many private firms are able to turn out the heaviest battleships. It has been estimated that in this respect Japanese resources in shipbuilding have been doubled since 1914.

The principal units of the Japanese fleet are:—

Battleships	..	..	..	6	Submarines	..	..	..	64
Battle Cruisers	..	..	..	4	Cruisers	..	..	..	37
Aircraft Carriers	..	..	..	5	Destroyers	..	..	..	106

Air Power in the Pacific.

A table of the air strength of Great Britain, Japan and U.S.A. in the Pacific is set out on pages 345-347. Under present conditions of aircraft development the vast distances of the Pacific militate against the successful use of aircraft except for patrol and reconnaissance duties.

During recent years the curtailment of cruiser strength has increased considerably naval patrol duties, and in consequence large flying boats, the latest of which are stated to have a radius of 2,000 sea miles and to be capable of riding a considerable sea, or airships should add considerably to naval strength in Pacific waters.

In range of visibility, speed, radius of action, the advantage is with aircraft, nor are they liable to attack, as surface vessels are, from submarines or mines.

The many Pacific islands form natural air ports, and the refuelling of aircraft in comparison with sea-going vessels is relatively simple.

While it is probable that air power is as yet insufficiently developed to be a decisive factor in the general strategy of the Pacific, air power and sea power in combination would produce effects of the first importance, as the following shows:—

“At no period of the World War did Germany lose command of the Heligoland Bight or of the Baltic, and she was therefore able to guard her coastline from naval attack. But this did not save her from the fatal pressure of the blockade, the operation of which was the real cause of her defeat. Nor, in our own case, would the undisputed command of the Sea of Japan protect us from blockade. It would be within the power of a superior naval opponent to strangle our commerce and cut off our supplies without sending a single ship into the Sea of Japan. The majority of the merchant ships entering Japanese ports traverse certain steamer lanes which the enemy would have no difficulty in closing. Having established a blockade, he would certainly endeavour to undermine our resistance by attacking exposed parts of the coast with his battleships, submarines, and aircraft. Many of our great commercial and naval harbours would be open to attack, and the enemy, being well informed as to our resources, would know in what direction to concentrate his efforts. On the Pacific coast the capital of Tokyo, the huge entrepot of Yokohama, and the naval arsenal of Yokosuka would lie open to the visitations of hostile flying machines. Osaka, the heart of our national industry, would not be beyond an enemy's reach, and the swarming industrial hives of Kyushu would present him with innumerable targets. Our coast defences, submarines, and torpedo boats might be able to prevent the near approach of hostile armourclads, but they could do nothing against an invading air fleet. The sole defence against this form of attack is a battle fleet of sufficient power to sweep the outer seas and make it impossible for the enemy to send out his aircraft-carrying vessels. Sea power and air power have already become synonymous terms.”*

1. GREAT BRITAIN.

R.A.F. China :

H.M.S. *Hermes*.

One (Fleet Fighter) Flight.

One (Fleet Reconnaissance) Flight.

R.A.F. Base, Kai Tak:

One (Fleet Reconnaissance) Flight.

R.A.F. Singapore:

No. 205 Squadron (Supermarine Southampton) Flying Boats.

* Mr. Nakamura, a Japanese writer.

2. JAPAN.

The Naval Air Service is composed of 17 squadrons of 16 machines, one balloon squadron and one airship squadron. Squadrons are stationed as follows:—

Kasungama	..	Seven squadrons and airship squadron.
Yokosuka	..	Five squadrons and balloon squadron.
Sasebo	..	Three squadrons.
Ohmura	..	Two squadrons.

The *Hosho* (9,500 tons) and *Akagi* (26,900 tons) are aircraft carriers, and in addition naval aircraft are allotted to battleships, cruisers, destroyers and some submarines.

Ten firms are engaged in the production of aircraft and engines, though it is not considered that these are equal to the best designs of European or American firms.

In the matter of meteorological conditions, Japan is unfortunately placed. High winds are very prevalent, the peculiar configuration of the country gives rise to sudden atmospheric changes and typhoons are not uncommon. Flying is therefore difficult and dangerous, and great experience and skill in the handling of aircraft is required.

3. UNITED STATES OF AMERICA.

*Aircraft in the Pacific.**Army Aviation Branch.*

Panama Canal Zone	..	Headquarters, One observation squadron, One pursuit squadron, One bombardment squadron, One photographic section, One service squadron.
Hawaii Zone	.. ..	Headquarters, Three pursuit squadrons, Two bombardment squadrons, One service squadron, One observation squadron, One photographic section.
Philippine Islands Zone	..	Headquarters, One bombardment squadron, One service squadron, One photographic section, One observation squadron, One pursuit squadron.

Naval Aviation Branch.

Canal Zone: Coco Solo—Fleet Base.

Pearl Harbour, Hawaii—Fleet Base.

Asiatic Fleet: One torpedo bombing squadron
One observation squadron.

U.S. Marine Corps Aviation Branch.

Three brigades of two squadrons:

Nicaragua, China Station, Guam.

4. DUTCH EAST INDIES.

The Government of the Netherlands maintains the following stations for the use of the Colonial Military and Naval Sections in the Dutch East Indies:—

Aerodromes: Andir (Bandoeng), Kalidjah (Poerwakarta),
Tjilitan (Batavia).

Landing Grounds: Surabaya and Semarang.

Emergency landing grounds are maintained every thirty miles between Batavia and Surabaya.

Seaplane Stations and Landing Grounds: Surabaya, Tandjong Priok, Semarang.

APPENDIX A.

TABLE SHOWING DISTANCES (NAUTICAL MILES) BETWEEN THE PRINCIPAL PORTS, ETC., OF THE PACIFIC OCEAN.

	Singapore.	Hong-Kong.	Vancouver.	Auckland.	Sydney.	Port Darwin.	Panama.	Honolulu.	San Francisco.	Guam.	Manila.	Yokohama.
Singapore ...	—	1,440	7,000	5,000	4,200	2,300	10,500	5,900	7,350	2,900	1,340	2,390
Hong-Kong ...	1,440	—	5,800		4,450		9,200				640	1,580
Vancouver ...	7,000	5,800	—	6,200	6,900		4,000	2,400	740			4,200
Auckland ...	5,000		6,200	—	1,300		6,500	3,800	5,700		4,800	4,800
Sydney ...	4,200	4,450	6,900	1,300	—		7,700	4,400	6,500		3,900	4,400
Port Darwin	2,300	9,200				—						3,000
Panama ...	10,500	9,200	4,000	6,500	7,700		—	4,700	3,300	8,000	9,400	7,700
Honolulu ...	5,900		2,400	3,800	4,400		4,700	—	2,100	3,300	4,800	3,400
San Francisco	7,350		740	5,700	6,500		3,300	2,100	—	5,000	6,200	4,500
Guam ...	2,900						8,000	3,300	5,000	—	1,500	1,400
Manila ...	1,340	640		4,800	3,900		9,400	4,800	6,200	1,500	—	1,800
Yokohama ...	2,890	1,580	4,200	4,800	4,400	3,000	7,700	3,400	4,500	1,400	1,800	—

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CHAPTER XVIII

COMMUNICATIONS BY AIR.

It has been previously noticed that the discovery of the sea routes to the Americas and the Far East radically altered the position of Great Britain and gave her that sea centrality which has formed the basis of her power. This sea centrality served to make the nation realize that it must be continually upon the sea and use the sea routes as the binding links in the Empire that was built up during the sixteenth, seventeenth, and eighteenth centuries.

Now that science has opened up new routes through the air, the question may well be asked whether the geographical position of this country gives her the same undoubted advantages in the air that sea centrality has done in the past.

Though it is clear that this question cannot be fully answered at the present stage, the Imperial Conference of 1926 was sufficiently impressed with the great benefits, both political and commercial, to be derived from the speeding up of imperial communications by the use of the air to recommend to the various Governments that the development of their air services should become a subject of early and considered study.

As in the case of the sea, the successful building up of air routes must depend in the long run upon the economic factor. The service given by the air must be such as to make it worth paying for. It is probably true that to-day the older forms of transportation have reached the limit of the speed that they can economically provide and that, therefore, the essential factor in air travel is its speed combined with reliability and regularity.

At present most air lines receive Government subsidies in one form or another, and are, therefore, not on a satisfactory economic basis. This state of affairs will exist for some years as the rule rather than the exception, and will probably continue until the aircraft industry has placed itself upon as sound an economic basis as the older forms of transportation; that is, that it is able to compete with them in the open market, to provide regular and reliable services without subsidization. In this way a healthy aircraft industry both on the operational and constructional sides will be evolved.

At present, in any new undertaking of this kind, initial outlay is heavy; maintenance, depreciation, insurance, general overhead charges are necessarily high, as must also be the first capital cost in the provision of bases upon the air routes, but even these will

not be as heavy as the expense entailed in the past upon similar facilities for shipping.

Air transport requires no fixed lines or closely sited stations, but gives direct point-to-point communication in a way that road and rail cannot do, and it is consequently more flexible and more quickly adaptable to changing demands; moreover, the services required for the daily operation of aircraft—meteorological services, ground staff, etc.—compare favourably in number and cost per mile with similar “ground” services necessary for transport by rail.

Such overhead charges and operational costs will show a progressive decline as the number of “passenger-miles” flown increases and when further scientific developments in engine construction, aerodynamics, etc., occur, in direct consequence of which commercial flying will be placed upon a competitive basis and thrive by virtue of the service it can perform to the community at large.

During 1929 returns show that nearly 400,000 passengers, 4,000 tons of freight and 400 tons of mails* were carried by aircraft within British territories, and the stage is approaching when the use of the air will no longer be exemplified by a few passengers flying daily between London and the Continent, but when overhead air transport will become the normal method of express delivery of passengers, mails and goods. “Though the study of air economics can hardly be said to have begun, yet the social and political effects of air travel upon the organization and life of the Empire will be of such supreme importance that it is essential that the present developmental policy shall be founded upon sound economic theory, so that the fullest benefit may be reaped from the effort of technical research and aeronautical engineering progress.”†

In this way air transport will become dovetailed into the general transportation system of the country, and will take its place beside land and sea forms of travel in a rationalized communication system.

Whatever may be the future for air transport within the British Isles, the need for Empire air routes is imperative.

The gain from the speeding up of the movement of important personages and despatches in both political and commercial worlds is too obvious to need comment. The establishment of such air routes would help as nothing else would to solve the most pressing of Empire problems; it would assist in the settlement of many of the overseas Dominions and secure much-needed readjustment of the population problem; it would strengthen the ties of sentiment

* “Air Annual of the British Empire, 1930,” p. 164, Messrs. Gale and Polden.

† C. E. R. Sherrington in the “Air Annual of the British Empire.”

and promote the increase of Commonwealth trade; in a word, air communications would weld the whole Commonwealth into a real unity. That such unity is brought visibly nearer may be seen from the table below setting out the comparative times for the conveyance of mails by the older forms of transport and those on the air routes now or soon to be in operation:—

<i>Route.</i>	<i>Land and Sea Transport.</i>	<i>Air.</i>
London—India	14 days	7 days.
London—Cape Town	17 „	12½ „
London—Australia (Freemantle)	26 „	17 „
Calcutta—Rangoon	2 „	9½ hours
Bombay—Rangoon	5½ „	24 „
London—Khartoum	10 „	5½ days.
London—Uganda (Entebbe).. .. .	21 „	7½ „
London—Kenya (Nairobi)	20 „	7½ „
London—Tanganyika (Dar-es-Salaam)	21 „	9½ „
London—Tabora	22½ „	9 „
London—N. Rhodesia (Broken Hill)	21 „	12 „
London—Southern Rhodesia:—		
Salisbury	21 „	12 „
Bulawayo	20½ „	11 „
London—South Africa:—		
Johannesburg	18-19 „	11½ „
Durban	19-20 „	12 „

Striking as these are, the ideal to be aimed at should be to reduce the distances within the Empire, so that each part should be at least within one week of any other part.

New Zealand would be 168 hours' distance from Great Britain.

Australia	„	120	„	„	„
South Africa	„	80	„	„	„
Bombay	„	60	„	„	„
Montreal	„	60	„	„	„

India, South Africa, Australia and Canada would be within 100 hours of each other.

Whatever may be the ultimate means whereby these Imperial air services are realized—by airship, flying-boat or landplane—it is clear that the question is one of very great difficulty, particularly so for an Empire such as the British.

One of the Imperial air services has now been in operation approximately two years, and has served to show the peculiar difficulties in the establishment of Imperial air services and the essential differences between those of the Empire and of the other continental nations or of America. The fact that flying is at

present "land-bound" rather than freely "supermarine" has raised many difficulties in the establishment of the present route. Long and complicated negotiations between this country and the various foreign Governments over whose territories British machines passed had to be undertaken. The present route is not, therefore, an "all-red route," and until the air routes of the Commonwealth become freely supermarine the attainment of this ideal will not be possible.

Air routes will then probably be of two types: those that are supermarine will probably, so far as present scientific knowledge has gone, be by airship* for the longer distances, and by flying boat for the shorter.†

These routes will have to be furnished with all the requirements of the various types of aircraft—either mooring masts or sea docks and the means for the supply of gas and fuel. That these supplies may be furnished by special ships at sea is clearly a possibility of considerable value. In the supply of these air docks the Commonwealth would be already well furnished. The "land" air routes will be for landplanes what the garage and petrol pump are for the motor-car on the main roads of to-day. The more frequent these are and the better they are placed, the greater will be the development of flying within the Commonwealth.

In the matter of the protection of the air routes now or in the future to be in operation, the closest analogy between the seaways and airways exists.

So long as the air routes are over Empire territory or over the waters controlled by the navies of the Empire, protection other than that already provided will be unnecessary, but over narrow seas or where routes flank the shores of other Powers the necessity of defence is clear.

Such protective measures will be a joint responsibility of all the Commonwealth Governments, though upon Great Britain appears to rest the responsibility of safeguarding the most important part of the route to the Far East and Australia through the Mediterranean, Egypt, Iraq and India.

It may here be noted that the possession of these air routes and the defence bases upon them will not constitute air power, as the possession of overseas naval bases does not constitute sea power, but will serve to give a great mobility to the Imperial air

* The inquiry into the loss of H.M.A. R101 indicates that the disaster to that vessel was due to no structural defect or inherent disability, but to insufficient experiment after the alteration to the central bay of the vessel.

† Two semi-official announcements in the Press of recent date state that a flying boat with a range of 2,000 sea miles, and a new troop-carrying plane able to carry 40 passengers a distance of 1,500 miles, will both shortly be in operation. This notable advance in radius and paying load should considerably assist in the establishment of "all-red" routes upon a sound economic basis.

defence forces and will enable them to protect those passing through the air upon their lawful occasions.

Air bases, like naval bases, will require the protective services of land forces, and it will clearly be an advantage if such positions are wholly or in part defended by nature or by contact with the sea.

Air Routes of the Empire.

Great Britain—India.

This route, opened on April 1st, 1929, is operated by Imperial Airways, Ltd., on a subsidy basis. It is the longest air route in existence, being 5,544 miles in length. The service operates once weekly in each direction, leaving London every Saturday at 07.30 hours and reaching Delhi the following Sunday week at 09.10 hours. Both land machines and flying boats are being employed, while part of the journey is by train. Owing to political difficulties the route has been altered from time to time, but the route actually in operation at the time of writing is as follows:—

Section 1: London—Cologne—Nurnberg..... 545 miles.
Nurnberg—Vienna by train.

Section 2: Vienna—Budapest—Belgrade—Nish..... 570 miles.
Nish—Athens by train.

Section 3: Athens—Mirabella—Alexandria..... 609 miles.
Alexandria—Cairo by train.

Section 4: Cairo—Gaza—Rutbah Wells—Baghdad—Basra—
Bushire—Lingeh—Jask—Gwadar—Karachi—
Jodhpur—New Delhi..... 3,225 miles.

It is likely that the section London—Athens as at present routed will be altered to the Swiss-Italian route via Paris—Basle—Genoa—Naples—Brindisi—Athens and thence as set out above.*

Though the saving in time to Delhi is considerable, it falls short of the ideal by 100 hours, many of which could be saved by flying suitable stretches at night, but this is not yet a practical proceeding.*

The chief physical disadvantages of the route are the heat of and the height over the Arabian plateau, which reduces the paying load. Risks also occur of forced landings over the desert and along the Persian coasts, where facilities for dealing with such contingencies are not numerous.

* It should be noted that the total time to accomplish the flight from London to Delhi is necessarily dependent upon the amount of physical strain that passengers can bear. This, of course, does not apply to mails, and it is possible that the two forms of transport may be separated to secure the speeding up of mails.

The route is far from being over Empire or Empire-controlled territory; in particular the principal "change-over" stations are in foreign territory.

In 1927, four metal flying boats carried out a long cruise of 25,000 miles from England to the Far East and Australia. This flight, though fully supermarine, was not an "all-red" route. It clearly demonstrated the possibilities of flying boats upon Imperial air routes. The cruise was from every point of view successful. "The aircraft and engines of the Flight have all been most satisfactory, they have given no trouble of any consequence and have caused no forced landings, only very minor replacements have been necessary, and they are still in very good condition. The water-tightness of the metal hulls and wing-tip floats has been excellent."*

The route followed on this flight as far as Karachi was as follows:—

<i>From</i>	<i>To</i>	<i>Distance</i>
Felixstowe	Plymouth	276 sea miles.
Plymouth	Brest	380 "
Brest	Marseilles	310 "
Marseilles	Naples	440 "
Naples	Brindisi	230 "
Brindisi	Athens	340 "
Athens	Abukir	500 "
Abukir	Alexandretta	442 "
Alexandretta	Ramadi	418 "
Ramadi	Hinaidi	60 "
Hinaidi	Basra	260 "
Basra	Bushire	190 "
Bushire	Henjan	348 "
Henjan	Gwadar	380 "
Gwadar	Karachi	260 "

A third and "all-red" route might be:—

Plymouth—Gibraltar	..	..	..	1,200 miles.
Gibraltar—Malta	..	..	..	985 "
Malta—Cyprus	..	..	..	1,250 "
Cyprus—Baghdad	..	..	..	650 "

And thence via the accustomed route to Karachi. This route, save for the section Cyprus—Baghdad, would be freely supermarine. Like the sea routes in the Mediterranean, it suffers from the possibility of interruption, being flanked by French and Italian territory, notably from the North African shore after passing Gibraltar, and from the southern end of the Italian peninsula.

* From Log of the R.A.F. Far-East Flight.

Great Britain—Australia.

This service as at present designed is an extension of the Great Britain—India route.

It is proposed to continue the route from Delhi to Rangoon in two sections:—

Delhi to Calcutta	815 miles.
Calcutta to Rangoon	810 „

This route has been frequently flown and presents difficulty only in the second section, due to the heavy rainfall and bad visibility on the Burma coast.

The first section of the above route is completed, and will be:—

Delhi—Cawnpore	240 miles.
Cawnpore—Allahabad	118 „
Allahabad—Gaya	195 „
Gaya—Asansol	144 „
Asansol—Calcutta	118 „

RANGOON—PORT DARWIN.—The last section of the route largely awaits development. The Far-East flight after leaving Rangoon proceeded as follows:—

Rangoon—Mergui	307 miles.*
Mergui—Penang	540 „
Penang—Port Swettenham	195 „
Port Swettenham—Singapore	200 „
Singapore—Klabat	215 „
Klabat—Batavia	320 „
Batavia—Surabaya	370 „
Surabaya—Bima	375 „
Bima—Kupang	310 „
Kupang—Broome	470 „

It may be presumed that, later, advantage will be taken of the route from Port Darwin via Daly Waters and Charleville to Brisbane already flown by Q.A.N.T.A.S. Co. or to Perth by Western Australia Airways.

Great Britain—Cape Town.

Proposals for a London—Cape Town air service were submitted in 1926 to the Imperial Conference, when it was stated that considerable investigation of the route had been carried out and an experimental service on the northern section already been put into operation.

* It is understood that arrangements have been concluded between the British and Dutch Governments whereby air facilities to India and beyond are to be made available for Dutch machines; in return the Dutch will grant the use of their organization in the D.E.I. to British machines *en route* to Australia.

Recently certain modifications in the proposed route have been adopted following upon the increased knowledge derived from service flights and the observations of Sir Alan Cobham and Captain Gladstone.

The route will be covered partly by landplane and partly by seaplane, and it may be most conveniently divided into sections.

SECTION 1: CAIRO—KHARTOUM.—From Cairo to Khartoum the terrain is desert, and the Nile is an uncertain river winding between sandbanks. Landing grounds are easily prepared and maintained, safe forced landing grounds are abundant, and generally the operation of landplanes presents less difficulty than the operation of seaplanes.

SECTION 2: KHARTOUM—KISUMU.—From Khartoum to the southern border of the Sudan, the region of tropical rains having been entered, the soil is either black cotton soil or swamp, the making of all-weather landing grounds is either difficult or impossible, and the Nile and the lakes provide admirable alighting places for seaplanes. From Khartoum to the lakes of Central Africa, therefore, the route is only feasible as a seaplane route. Detours either to the west or east, to avoid the impenetrable area of the Sudd, involve flight over partially isolated or even unknown regions where the problem of supplies would at present be insurmountable.

South of Lake Victoria the difficulty of making and maintaining landing grounds is not great, and there are long stretches of land between suitable alighting places for seaplanes. From Kisumu to Cape Town, therefore, is a land-machine route.

SECTION 3: KISUMU—CAPE TOWN.—From Kisumu to Cape Town will be a land-machine route, the change over from land machine to seaplane or *vice versa* being suitably undertaken at Kisumu, which has a landing ground close to the lake.

At present the route is operated only as far as to Mwanza on Lake Victoria. The journey may be supposed to follow the present London—Cairo route and thence proceed via Khartoum, Nairobi, Broken Hill, Salisbury and Bulawayo.

The route to be followed will be as follows:—

Cairo—Aswan	..	..	..	..	595 miles.
Aswan—Khartoum	..	..	..	..	645 „
Khartoum—Juba	..	..	..	..	825 „
Juba—Nairobi	..	..	..	..	705 „
Nairobi—Mbeya	..	..	..	..	640 „
Mbeya—Salisbury	..	..	..	..	825 „
Salisbury—Johannesburg	..	..	..	..	690 „
Johannesburg—Cape Town	..	..	..	..	825 „

Intermediate points will be Assiut, Luxor, Wadi-Halfa, Kareima, Kosti, Malakal, Shambe, Port Bell, Kisumu, Moshi, Dodoma, Mpka, Broken Hill, Bulawayo, Petersburg, Kimberley and Victoria West.

There are 26 air stations for regular call and adequate rest houses are provided at eleven places upon the route of 5,750 miles from Cairo to Cape Town.

It is also expected that part of this route will, to secure substantial saving of time, be flown by night.

The total subsidy payable in respect of the air routes when in full operation is limited to a total of £940,000, of which £670,000 is recoverable from the Governments of the territories through which the route passes.

It should be noted that Johannesburg will become a junction on the new air route from Walfish Bay, which is shortly to be operated by the Junkers Aircraft Company on behalf of the Union of South Africa.

Airship Routes.*

Routes for this type of air transit are at present limited to two:—

(1) Great Britain to Canada.

(2) Great Britain to India.

Route (2) will ultimately be continued to Australia. A third route to South Africa is in preparation and a fourth route to the West Indies is projected.

In view of the extensive preparations and auxiliary services required for airships, progress will be relatively slower than in the case of landplanes or seaplanes. Mooring masts, sheds, etc., once established, are permanent buildings, and involving, as they do, great expense, can only be erected after taking into consideration all material factors.

* In an official statement in the House of Commons the Under Secretary of State for Air informed the House that pending an examination of the Report upon the R101 disaster the decision as to the further development of airship travel must remain in abeyance. Whatever changes may take place it is to be presumed that the organization of airship facilities, etc., will remain unaltered. These arrangements still stand, and are therefore inserted, though all work is suspended.

H.M.A. R100 has completed successfully a trip from Cardington to Canada and back.

The following routes on which it is proposed that airships shall operate are as follows:—

Great Britain to Canada.

Cardington (Bedfordshire) is the parent mooring mast and possesses all the necessary facilities for overhaul, etc.

A mooring mast has been erected at St. Hubert near Montreal for the reception of the ship.

The westward route will probably be via the Azores and Bermuda to avoid the prevailing westerlies. The homeward route will be to the northward via Newfoundland.

The outstanding disadvantage of the route to Canada appears to be that arising from ice and snow. Under these circumstances the winter route might be from England to New York or Baltimore. Apart from the physical advantages of this route the traffic between England and New York is considerably larger than that to Canada.

Great Britain to West Indies.

A second Atlantic route under consideration is from England to Jamaica.

This service would be via the Azores and Bermuda. An extension of this route to the South American continent should not prove unsatisfactory commercially.*

Great Britain to India.

This route for which the extensive preparations are completed will be to Ismailia (Egypt), where a mooring mast has already been erected. The ship will then proceed via Basra and along the Persian coast to Karachi, where a mooring mast and repair hangar have been completed. An alternative route projected is via Aden and across the Arabian Sea to Karachi.

It is proposed to extend the route from Karachi to Colombo, and thence via Cocos Islands to Perth (Western Australia), Melbourne, and Wellington (N.Z.).

Great Britain to South Africa.

Two routes on this service are projected:—

- (a) Via Bathurst, where it is proposed to erect later a mooring mast, thence to Cape Town and Durban, where a mooring mast is in course of erection.
- (b) To Ismailia and thence via Aden and Mombasa to Durban.

* A recent Press announcement states that an air service has been put into operation between Jamaica and Montreal.

Durban will be a junction for a further extension to Perth (Western Australia). Considerable advantage would be derived on this latter part of the route from the prevailing westerly winds (Roaring Forties).

Additional mooring masts will be required at important terminal points, and if experience warrants the outlay these will be erected at Colombo, Melbourne, and Wellington (N.Z.).

The routes outlined above will doubtless form experimental routes, and others will be added as knowledge of the operation of airships develops. The world flight of the Graf Zeppelin gives every reason to anticipate success.

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CHAPTER XIX

COMMUNICATIONS BY CABLES AND WIRELESS TELEGRAPHY.

THE importance of efficient means of intercommunication between the widely scattered components of the British Empire is of such paramount importance both in peace and in war that the subject has occupied a very large amount of public attention during the years that have followed the General War. In 1919, 1924 and 1928 extensive inquiries have been conducted by the Governments of Great Britain, the Dominions and India, and within the past two years plans have finally been completed for the rationalization of the entire Imperial communications system.

Prior to the invention about the beginning of the century of intercommunication by wireless telegraphy, long-distance communication was carried on in the main by submarine cable, and it is only in the nature of things that in this branch of activity the Empire should have held a leading place, since submarine cables are an obvious adjunct of sea power. Of a total length of 325,000 miles of submarine cable British companies owned approximately 60 per cent., and thereby in no small degree contributed to the maintenance of London as the leading financial centre of the world, as well as providing in case of war a means of Imperial intercommunication which was rapid and secret, and so long as British sea supremacy was unchallenged secure against any form of interruption.

From the point of view of Imperial defence, the safest means of communication would be by these cables which, originating and terminating in British territory, do not touch at foreign territory *en route*. It is only those systems which comply or nearly so with these important conditions which will be here considered. (The figures in brackets indicate the number of cables.)

(A) GREAT BRITAIN—CANADA.

- (i) Penzance—Halifax (via Azores).
- (ii) Penzance—Halifax (via Harbour Grace, Newfoundland).
- (iii) Two American cables owned by the Commercial Cable Company and the Western Union Telegraph Company.
- (iv) One cable of the British Anglo-American Telegraph Company leased for 99 years to the Western Union Telegraph Company. These three cables run from Porcella Cove to Bay Roberts, Newfoundland.

(B) GREAT BRITAIN—AUSTRALIA—NEW ZEALAND.

- (i) In the first instance the cables to Canada referred to above. Thence by land line rented from the Canadian Pacific Railway Company and thence by two cables formerly the property of the Pacific Cable Board from Bamfield (B.C.) to Southport (Queensland), Sydney (N.S.W.), and Auckland (N.Z.). No part of this route touches foreign territory.
- (ii) Via Gibraltar (2)—Malta (5), Alexandria (6), Suez (4), Perim (4), Aden (4), Zanzibar, Seychelles, Mauritius, Rodriguez, Keeling Islands, Freemantle. This route touches foreign territory at Alexandria and Suez only.

(C) GREAT BRITAIN—SOUTH AFRICA.

- (i) Via Gibraltar (2), Malta (5), Alexandria (6), Suez (4), Perim (4), Aden (4), Zanzibar, Seychelles, Mauritius, Durban, Cape Town. This route touches foreign territory only at Alexandria and Suez.
- (ii) Via Azores (2)—St. Vincent (2), St. Helena, Cape Town. This route touches foreign territory only at the Azores.

(D) GREAT BRITAIN—INDIA.

- (i) As described above to Aden, thence to Bombay (4) and Colombo (1).*

Other important inter-Imperial communication routes are as follows:—

- (i) Cape Town—Mauritius—Rodriguez—Keeling Islands—Freemantle.
- (ii) Colombo—Penang (2)—Singapore (5)—Hong-Kong.
- (iii) Halifax—Bermuda—Turks Island—Jamaica.

Imperial Communications by Wireless Telegraphy. *

From the beginning of the century the important possibilities of intercommunication by wireless telegraphy had been recognized and the Imperial Conference of 1911 passed a resolution to the effect "that the great importance of wireless telegraphy for social, commercial, and defensive purposes renders it desirable that a chain of British state-owned wireless stations should be established within the Empire." Up to 1914, however, little had been done, though the Marconi Company had put forward proposals for the erection of an Imperial wireless system to provide a complete network of intercommunication by means of eighteen stations.

* The Indo-European Telegraph Company maintain a land line originating from Lowestoft and terminating at Karachi, but the entire intermediate stages are in foreign territory. The route is Lowestoft, Emden, Berlin, Warsaw, Odessa, Tiflis, Teheran, Kela, Karachi.

In 1919 the Imperial Wireless Committee put forward fresh proposals for a scheme whereby Imperial communications should be secured by a series of steps, each step having a range of approximately 2,000 miles. This scheme provided for the erection of eight stations in England, Egypt, India, Nairobi, South Africa, Singapore, Perth and New Zealand. Each of these stations would have been good for very great distances for about six hours a day, for medium distances for twelve hours and for the full twenty-four hours between themselves. Such a scheme did not commend itself to the Governments of the Dominions and in particular that of Australia. The Imperial Conference of 1921 accepted a resolution to the effect that it was agreed that His Majesty's Government should take steps for the erection of the remaining stations for which they are responsible, as soon as the stations are designed; that the Governments of Australia, the Union of South Africa, and India should take similar action so far as necessary; and that the Governments of Canada and New Zealand should also co-operate. The above resolution was accepted by the Prime Minister of Australia subject to giving full freedom of action to that country to decide the method in which Australia should co-operate.

In 1922 a separate agreement was entered into by the Government of Australia with Amalgamated Wireless (Australia), Limited, an offshoot of the parent Marconi Company, to construct and operate an installation that would give direct communication between Australia and Great Britain and Australia and Canada. Canada, South Africa and India also entered into similar agreements with the Marconi Company.

In 1922 it was announced that the "step" scheme had been abandoned and that the Government had decided to erect in England a station which should provide efficient direct commercial communication with India, South Africa and Australia. As a result of this decision the erection of the "link" stations on the Suez Canal and in East Africa were to be deferred and those at Singapore and Hong-Kong reconsidered. Work was begun on the erection of a station at Rugby, but no satisfactory arrangements could be reached with the Marconi Company whereby co-operation could be secured between the Government and the Company.

The Imperial Economic Conference of 1923, noting the delays caused by the failure of the Government and the Company to reach agreement, resolved "that this Imperial Economic Conference affirms the importance of establishing as quickly as possible an efficient Imperial service of wireless communication, and is of opinion that the several Governments of the Empire should take immediate action to remove any difficulties which are now delaying the accomplishment of this, while providing adequate safeguards against the subordination of public to private interest."

In 1924, the "Donald" Wireless Committee suggested—

- (1) That the State, through the Post Office, should own all wireless stations in Great Britain for communication with the overseas Dominions, except Canada, the Colonies and Protectorates.
- (2) That the Leaffield Station should be enlarged as recommended by the Post Office wireless experts and engineers; that the new high-power station now building at Rugby should be extended to a sixteen-mast station; that a second new station of similar capacity be erected; and that these works should be put in hand without delay.
- (3) That each of the high-power stations should be of world range, and equipped with the latest apparatus, so that the highest degree of efficiency can be attained.
- (4) That, if necessity arises, full advantage be taken of the Patents and Designs Act, 1919 (Section 8), under which the Crown can acquire the use of all patented inventions which may be useful for public utility services such as wireless.

Up to 1924 and when these recommendations were put forward wireless telegraphy had been conducted on the long-wave system effected by means of stations employing wave-lengths up to 16,000 metres and requiring very high power for transmission. It was then shown that, with the aid of newer apparatus, short waves not exceeding 100 metres in length and employing power of about 15 kilowatts could be satisfactorily employed over long distances. At the same time it was also found that it was now possible to concentrate these waves into a beam, thereby, in the first place, preventing any unnecessary dispersion of power and introducing, in the second, a certain measure of secrecy which had before been clearly impossible under the old method of "broadcast" transmission.

The effect of these discoveries was to render the old system, if not practically obsolete, at least unable to compete commercially with the new systems, and arrangements were quickly entered into with the Marconi Company for the erection of short-wave beam wireless stations. These were erected and came into operation during 1926 and 1927 as follows:—

- (A) In Great Britain for transmission to:—
 - (i) Canada and South Africa, at Bodmin.
 - (ii) India and Australia, at Grimsby.
- (B) In Great Britain for reception from:—
 - (i) Canada and South Africa, at Bridgwater.
 - (ii) India and Australia, at Skegness.

These stations in Great Britain are owned and operated by the Post Office on behalf of the Government. In Canada the service is operated by the Canadian Marconi Company under annual licence and general control over rates by the Canadian Board of Railway Commissioners. All operators must be British subjects. In Australia the service is operated by Amalgamated Wireless, Ltd., the Government of the Commonwealth holding, however, a majority of the shares of the operating company. In South Africa a private company operates under licence from the Union Government, and must employ South African nationals; and similar arrangements as to governmental control and operation by British subjects is made by the Indian Government.

By 1928 it became apparent that beam wireless was causing serious losses to the cable companies both by the reduction of traffic and of receipts, and it appeared not unlikely that some at least of the cable companies might be compelled to realize their assets and that it was not unlikely that foreign interests might be enabled thereby to strengthen their position in the attempt to secure greater control over world communications.

In 1928 an Imperial Wireless and Cable Conference was convened to consider the whole position in the light of the various developments which had followed the introduction and operation of the beam system. This conference, representing Great Britain, the Dominions and India, found that the main features of the problem of communication were as follows:—

- (a) The cable undertakings operating between the constituent parts of the British Empire would be unable to continue on a paying basis in face of unrestricted competition on the part of Beam Wireless Service.
- (b) The Eastern and Associated Telegraph Companies would be in a position to go into voluntary liquidation and dispose of their assets to the highest bidder.
- (c) There were indications that foreign enterprise might be ready to seize an opportunity of acquiring such part of the Eastern and Associated Companies' system as could be transferred to a foreign purchaser.
- (d) Owing to the lack of complete secrecy and certainty, "wireless" is not yet in a position entirely to supersede cables. Cables, therefore, still possess great value for the maintenance of necessary communications between the constituent parts of the Empire for commercial and strategical purposes.

It was ultimately decided that an amalgamation of all the cable and wireless undertakings providing communications between the various parts of the Empire should take place in order to secure

unity of control and direction and provide adequate safeguards against foreign encroachment. In this way the whole system of communications is rationalized and efficient and economical management is secured. It is further proposed that an Imperial Communications Advisory Committee representing Great Britain and the Dominions and India and a representative appointed by the Secretary of State for the Colonies should be set up to exercise specified powers of supervision and control in matters concerning the increases or reductions of rates and the maintenance of strategic cables. This merger received the approval of the Governments concerned, and the new Company, Imperial International Communications, Ltd., began operations at the end of September, 1929. The new Company has under its control 164,000 miles of submarine cable and 253 cable and wireless stations.

It is understood that the Company has proposed considerable extensions of Imperial facilities by wireless, and arrangements to this end have been concluded for the supply of news to the West Indies. Agreements have also been reached with the Governments of Cyprus and Southern Rhodesia for the establishment of beam wireless with Great Britain, and further extensions are shortly to be made in East and West Africa, Hong-Kong, British Guiana and the Falkland Islands.

It is also to be expected that the communication systems in Australia, Canada and India will in the same way as in Great Britain ultimately be rationalized into a single system.

Long-distance wireless telephony also has undergone considerable extension, and it is possible to speak on the telephone from Great Britain to practically 90 per cent. of the telephone-using world. Telephone services already operate between Great Britain and Australia and Canada, and a receiving station is under construction in South Africa and negotiations are being undertaken for a service to India.

Though wireless still suffers from lack of the secrecy that is given by a cable the two ends of which are in private hands, much has been achieved in the direction of greater secrecy either by transmitting at very high speeds or by "scrambling" messages. Other uses of wireless are now so well known as to require no recapitulation, and for communications between aircraft and aircraft or aircraft and the ground wireless telegraphy or telephony is in as common use as it is between ships and the shore.

It may here be noted that the almost universal use of wireless telegraphy has somewhat modified the undoubted strategic strength of the position of Great Britain in respect of long-distance communications which her sea power had previously given her, as was clearly shown by the fact that at the outbreak of war the German Government was able from its high-power station at Nauzen to communicate with all its overseas possessions or ships still at sea.

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CHAPTER XX

THE DEFENCE SERVICES OF THE BRITISH EMPIRE.

THOUGH the Imperial Conference in 1926 defined the British Commonwealth of Nations as being composed of autonomous communities within the British Empire, equal in status, in no way subordinate to each other in any aspect of their domestic or external affairs, it hastened to add that it depended essentially, if not formally, on positive ideals. Free institutions were its life-blood; free co-operation was its instrument.

It is thus that within the elastic bounds of the third British Empire a number of virtually independent nations have sprung into being. Nor is the process as yet complete. Dominion status has been achieved up to the present only by those parts of the Commonwealth in which the white race is predominant. The experiment will in time be extended (and in one case—that of India—is in actual process of extension) to those parts mainly inhabited by the non-white peoples.

Though as each component of the Empire reaches Dominion status and becomes, once and for all, the sole judge both as to the extent of its autonomy and the spheres within which it is exercised, it is impossible to escape the conviction that the need for adequate security must remain not only in itself a common aim but must also condition, whether in the political, economic or industrial spheres, the free development of every member of the Commonwealth.

While the equality of status where reached does not as yet extend to function, it is clear that as the overseas nations develop in population and material strength their share of the burden of defence will increase and the present disparity in this respect between Great Britain and the Dominions will progressively decline, the assumption of the burden being at the same time accompanied by an increase in the responsibility for the direction both of the policy of the Commonwealth in peace and its strategy in war.

Modern war is in its highest development a social cataclysm affecting every aspect of the life of the Commonwealth, and will lay every member under contribution towards its effective prosecution. In the preceding pages, therefore, there have been briefly set out the material resources of the principal parts of the Empire together with the means of communication, which would enable

the various components to coalesce at will for the achievement of a common defence.

This is not of itself, however, sufficient. In addition to the proper utilization of the available resources of man-power and material, there must also exist an accurate appreciation of the functions of the defence forces, so that the whole structure may be adequately organized, economically, industrially and militarily, to meet the dangers that may arise. These dangers will arise from the efforts of an enemy to break down the will of the Commonwealth and will take the form of pressure, diplomatic or financial, on the one side and political, social, commercial, industrial or moral on the other.

Strategy has been defined as the co-ordination and direction of all the resources of a nation toward the attainment of the political object of the war—the goal defined by the national policy.

Though it may be well here to stress the fact that the goal of the national policy is now and must always remain a policy of peace, it being universally recognized that, territorially, the Empire has reached the utmost limits of its expansion and that a long period of development and consolidation is necessary to reap the full benefits of its resources, the fact must not be overlooked that the exercise of the various kinds of pressure may be actively and effectively employed against an enemy to impose the Empire's will to peace. Should such a course of action unhappily become necessary, every effort will be made to bring both the above categories of pressure to bear upon the nation or nations with whom the Commonwealth is at war.

It is unnecessary here to consider the methods whereby the pressure defined in the first category is exerted, as these means lie outside the functions of the defence forces, but it may be noted in passing that considerable diplomatic or moral pressure may be brought to bear by means of propaganda efficiently organized and ruthlessly applied either to undermine the Empire in the eyes of neutrals or to find a field for subversive action among the many and diverse peoples of the Commonwealth.

The types of pressure enumerated in the second category all lie within the function of military forces, and it is proposed to consider briefly the means whereby each defence service, by exerting the type of pressure most suited to it, can contribute towards the attainment of the goal of the national policy.

(1) The Pressure of Land Forces.

The primary objective of land forces is to paralyze the social life of the enemy people. This objective is usually attained by entering the enemy's country, taking over its administration or by any other available means, so interfering with its normal routine that the defeated state is in the end obliged to sue for

peace on such conditions as allow to the victorious state the realization of the political object for which it undertook the war. This entry into an enemy country is most usually preceded by the destruction of the opposing land forces. This destruction is accomplished by obtaining contact under conditions most unfavourable to the enemy, whose forces are, by means of surprise attack, encirclement or the breaking of his lines of communication, faced with dissolution or disruption, or retreat. This latter step causes him to surrender positions which are of value to him.

Land forces have been most usually employed to exert pressure against an enemy country, as their action is relatively rapid and the effects created are directly visible to and comprehensible by the enemy population. For these reasons land warfare has been during the ages the subject of deep study and of constant research into the improvement of its technique and of the matériel employed. The most marked progress has been in the improvement of weapons.

Improvements in the methods of transportation and of military hygiene have made possible the adoption of the principle of conscription which has led to the growth in the size of armies, profoundly affecting both the strategy and tactics of land warfare.

Though it is unlikely that the features of a future war will closely resemble those of the last, it should be noted that in the General War the old strategy of surprise or encirclement was nullified by the fact that both armies established themselves in a series of entrenched positions stretching from the North Sea to Switzerland. These lines, defended by every art of the engineer and rendered almost impregnable by the immense power of modern weapons, were only broken after four years of continuous fighting, the final collapse of the armed forces of Germany being due as much to the breakdown of the civil population behind the lines as to the military pressure exerted by the Entente.

Under circumstances such as these land warfare fails to retain those characteristics which have caused its employment in the past. It is in order to counteract this "stalemate" idea that the armies of to-day are being mechanized. The fundamental principle underlying "mechanization" is to employ the internal combustion engine as an instrument of war, thereby substituting "motor" power for "muscle" power. It is believed that in this way troops will gain greatly in the speed of their movement and in radius of action, largely by being relieved of the burden of equipment and being provided with a moving platform from which to direct their volume of fire while still in motion, this being previously incapable of accomplishment by the infantry soldier. Secondly, the armoured vehicle provides protection against the fire of small arms, though anti-tank weapons have made considerable advance. Thirdly, the mechanized tracked vehicle is

capable of surmounting considerable physical obstacles. Mechanization should thus restore, despite certain weaknesses (dependence upon large fuel supplies and spare parts, the inability of a rapidly moving force to make adequate reconnaissance), to land warfare its strategic principles and indeed add to them. In this process of mechanization the greatest advances have so far been made by the British Army, though the many possible theatres in which the army might be employed preclude a complete dependence upon the new arm and the displacement of the old.

As far as Great Britain is concerned an organization has been set up to provide a relatively small but highly trained professional army. As such it cannot effectively intervene against the large conscript armies of the Continent, though at the beginning of the last war it provided a highly valuable flank defence to the larger forces of an ally.

Under the Cardwell system garrisons are provided for duty overseas and reliefs are found from the home battalions, from which latter are found the nucleus of an expeditionary force for employment overseas. The garrisons in Egypt, Malta and Gibraltar, larger in the last two places than are actually required, are available to form a mobile expeditionary force for service in the Middle-East area. By far the larger part of the British Army overseas is in India, in which latter country it serves the double purpose of providing internal security and protecting India against invasion. India serves as an admirable training ground, since minor operations are not infrequently undertaken and experience is gained in the conduct of war against semi-savage tribes and in difficult terrain.

The Commonwealth regular forces are organized for the purposes of providing local defence against external attack, for the training of the non-permanent militia and in certain cases, that of South Africa for instance, providing internal security.

It may be fairly held that the organization is adequate to the direct objects in view, the provision of immediate defence and the conduct of small wars, and that it is also capable of rapid and very large expansion in the case of a large-scale continental war.

(2) The Pressure of Sea Forces.

The first objective of naval forces is the exercise of direct pressure against the economic life of the enemy peoples, which is obtained by the control of trade ways and communications. Such control is sought primarily by the destruction of the opposing fleet or alternatively by close blockade, so that the necessary supervision of trade communications may be exercised under the most favourable conditions. The function of a fleet is thus two-fold: to secure to the country the uninterrupted inflow of goods in war as is customary in peace and to deny these advantages to an enemy.

The essential difficulty of fulfilling these two functions lies partly in the nature of the sea communications themselves and partly in the essential weakness of naval forces acting defensively. The trade-ways of Great Britain at any rate are world-wide, and it will be readily appreciated that they can be adequately defended only by offensive action which secures the destruction of the enemy fleet or by close blockade, and even then forces must be detached from the blockading force to deal with sporadic attacks from vessels which may have evaded the blockade.

When it is further considered that in the case of Great Britain unless these vital and world-wide avenues of trade are all protected, the country is in no position to make war at all, there is but one choice for this country. She must be capable of exerting offensive strategy to attain the essential cover for her sea communications.

The prime motive of the offensive strategy thus imposed upon Great Britain is to obtain the exercise of the command at sea, from which in reality all the advantages military and economic flow; these may be briefly summarized:—

- (a) The attack upon the trade routes of the enemy and the defence of our own,*
- (b) The transport overseas and the maintenance of expeditionary forces,
- (c) The prevention of the invasion of this country by the military forces of an enemy.

The naval forces under the direct control of the various Dominions are, apart from purely local coast defence, organized to contribute towards the protection of the essential trade routes, and since the seas are one and indivisible and naval strategy and tactics are, apart from the question of bases overseas, the same in any sea, there can exist the closest co-operation between the navy of Great Britain and those of the overseas Dominions.

The total trade routes of the Commonwealth amount to approximately 80,000 miles, and their protection offers, therefore, under the present conditions, as, for example, that of naval parity with the U.S.A., an extremely difficult problem, the principal solution for which, whether secured by offensive or defensive means, is to be found in the provision of the highest degree of mobility for the fleets.

* See Chapter XV, in which it is suggested that the defence of trade routes is under modern conditions a question of the protection of vital areas rather than the protection of entire routes. In the same way it is clear that it is not anticipated that adequate protection for trade routes could be afforded against a combination of hostile Powers. The "prevention" of such a combination is a political and not a military question.

cf., also, Fayle, *op. cit.*, Vol. I, *cc. c.*, 2, 17 and 23.

In the effective conduct of such operations the value of bases is clearly of paramount importance, particularly so to a world-wide Power and one to which the offensive is the essential element in its strategy, and their importance was accordingly stressed in the defence resolutions of the 1923 Conference.*

The importance of overseas bases tends to increase, not only because of the extra mobility they grant to the fleet in performing its world-wide task, but because, even though a navy is mechanically propelled and to a considerable extent self-sufficient, a modern fleet in being is an immense and highly complex organism, and it is therefore essential that such bases should be well furnished with facilities for repairs and refit, refuelling, etc., in order to avoid excessive demands upon subsidiary transport services at a time when these are urgently required for the supply of the many needs of the nation.

(3) The Pressure of Air Forces.

The Royal Air Force is as a separate force only fourteen years old, and as such—as a separate exponent of the power of a nation—was unable in the General War to be put to a full test. Since the war two schools of thought have arisen. One claims for air power that it is of itself able to perform the function of bringing pressure of a kind not able to be exercised before upon an enemy to break down his will to resist. The other sees in air power only a useful adjunct to the older arms. Whichever view may be individually held, it is clear that the first view has not as yet been subjected to sufficient test and that a final decision must be withheld until adequate data be forthcoming. This in the nature of things can only be provided under conditions of war between civilized peoples. The second view received ample testimony during the last war, and has subsequently become firmly established and as such forms an important part of the present work of the Royal Air Force.

Whether air power is destined to exercise this novel form of pressure or not, it is universally recognized that air power has revolutionized the technique and added immensely to the strategical and tactical problems both of the navy and the army.

Air power, therefore, from whichever view-point it be regarded, was clearly of such importance in the problems of defence that it was found desirable to lay down the main principles of its employment, in view of the resolution accepted by the Imperial Conference of 1923 emphasizing "the necessity for the maintenance

* "Adequate provision for safeguarding the maritime communications of the several parts of the Empire and the routes and waterways along and through which their armed forces and trade pass.

"The provision of naval bases and facilities for repair and fuel so as to ensure the mobility of the fleets."

by Great Britain of a Home Defence Air Force of sufficient strength to give adequate protection against air attack by the strongest air force within striking distance of her shores."

Accordingly a sub-committee of the Committee of Imperial Defence presided over by Lord Salisbury laid down the following principles as to the employment of air forces:—

"In addition to meeting the essential air power requirements of the Navy, Army, Indian and Overseas commitments, British air power must include a Home Defence Air Force of sufficient strength adequately to protect us against air attack by the strongest air force within striking distance of this country.

"It should be organized in part on a regular and permanent military basis, and in part on a territorial or reserve basis, but so arranged as to ensure that sufficient strength will be immediately available for purposes of defence. The fullest possible use to be made of civilian labour and facilities.

"In the first instance, the Home Defence Force should consist of 52 squadrons, to be created with as little delay as possible, and the Secretary of State for Air has been instructed forthwith to take the preliminary steps for carrying this decision into effect.

"The coming of air power has profoundly affected the whole question of defence. Security means for us to-day something different from that which it meant a generation or two ago: or perhaps one should say that there is to-day a kind of insecurity which there was not then. Invasion was always to be feared, and security meant broadly the power to repel the invader or at all events to drive him out before he had wrought any irreparable mischief to the national life. Defence had then time to think and move. There was not in former days the danger of a swift, sudden stroke which might paralyze for the time a nation's whole power to resist, and even lay it prostrate at the feet of an enemy who had the means of following up his first blow."*

This statement of the influence of air power upon the question of security in general may be particularized in respect of the dangers of air attack in which London lies, not only on account of its geographical position on the east coast facing the Continent and with the River Thames leading to its heart, but because it is the very centre of the whole complex system of co-ordinated Imperial effort and would, therefore, be the object of the earliest and most strenuous air effort of an enemy, and it may well be a fact that within half an hour of the breakdown of diplomatic relations the full effect of an air offensive may be felt in London, and the question of the defence of this vital centre is of the first importance. For this defence a total of thirty-five squadrons has been allocated, of which twenty-two are day or night bomber and thirteen fighter

* J. M. Spaight, "Pseudo-Security," by permission of Messrs. Longmans.

squadrons. It is clear, therefore, that the threat of counter-attack is held to be the best form of defence that can at present be provided, though at the same time, in addition to the fighter squadrons, a searchlight and an anti-aircraft organization provided by the Royal Engineers and Royal Artillery units has been brought into being to co-operate with other air defence measures.

The offensive power of air forces has been greatly augmented by the modern tendency towards urbanization which in itself is a direct result of the industrialization of most of the countries of Europe. Such offensive action, while not directed against centres of population as such would be aimed against vital points—"key" factories, waterworks, electric power installations, etc.—the destruction of which would cause far wider spread distress than the indiscriminate bombing of the civil population would do.

Apart from this dislocation of the normal life of the civil population, the tendency of modern strategy to strike a blow at the political headquarters of a warring state is immensely assisted by direct air action. "Aircraft enable us to jump over the army which shields the enemy Government, industry and people, and so strike direct at the seat of the opposing will and policy. Provided that the blow be sufficiently swift and powerful, there is no reason why in a few hours, or at most days, from the commencement of hostilities, the nerve centre of one of the contending countries should not be paralyzed. A modern state is such a complex and interdependent fabric that it offers a target highly sensitive to a sudden and overwhelming blow from the air."* Whether such an attack would be possible until the opposing air forces had been defeated or not has not as yet been decided, though the results of the air exercises of 1930 appear to indicate that bombing attacks carried out by fast machines are difficult both to intercept and beat back.

The value of air power in the defence of the Empire, apart from Great Britain itself, lies in its mobility and rapidity to strike at the earliest possible moment, and so to delay or prevent a hostile landing or to check incipient revolt or exceptionally threatening civil disturbances. The strategic principle being one of rapid reinforcement rather than one of stationed garrisons, the analogy between sea power and air power is close, and the new air routes under development for civil purposes will serve to increase and intensify the mobility of the air defences of the Empire.

It is now an accepted principle that the Dominions should undertake their own initial air defence, but they will rely upon rapid reinforcement from the British air forces stationed abroad. With this end in view the Imperial Conference in 1923 emphasized "the desirability of the development of the air forces in the several

* B. H. Liddell Hart, "The Remaking of Modern Armies."

countries of the Empire upon such lines as will make it possible, by means of the adoption, as far as practicable, of a common system of organization and training, and the use of uniform manuals, patterns of arms, equipment and stores (with the exception of the type of aircraft) for each part of the Empire as it may determine to co-operate with the other parts with the least possible delay and the greatest efficiency."

British air forces are employed in the defence of Southern Arabia at Aden and in the mandated territory of 'Iraq and Palestine, and co-operate with the army in Egypt and India and with the navy at Malta and Singapore and in China.

British air forces serving abroad comprise twenty-two squadrons in all, of which eleven are centrally situated in Aden, Egypt, 'Iraq and Palestine to provide rapid reinforcement along the imperial air routes to the Far East; from the same stations it will also be possible to assist in the defence of the African possessions along the new air route to the Cape. The efficacy of such reinforcement is best seen in the recent Kabul evacuations which were carried out by squadrons drafted from 'Iraq. At present the largest gap in Imperial reinforcement by air is in Canada, it being not yet possible to bridge the distances intervening between Great Britain and the Dominion. Aircraft would have to be dismantled and shipped, and would thus lose their main strategic value of rapidity of movement.

The importance of aircraft in co-operation with land forces was recognized before the General War and by its close had become a dominating factor. "During the past year the part played by the Royal Flying Corps in modern battle has grown more and more important. Each successive attack has served to demonstrate with increasing clearness the paramount necessity for the closest co-operation between air and land arms."* Such co-operation may be either strategical or tactical, and there is every indication that the growth of mechanization will increase the assistance which may be rendered by the air arm in making more rapid and effective the pressure of which land forces are capable.

At present there are allocated for co-operation with army units eleven squadrons, six squadrons being provided for land forces stationed in Egypt and India, in addition to those serving at home.

During the General War the co-operation of aircraft with naval forces received fewer opportunities than was the case with land forces. Since the war increasing attention has been given to this aspect of air co-operation as well as to the part that may be played by aircraft in the protection of sea-borne traffic in the narrow seas, since very complicated technical questions are involved. The whole question of the co-operation of the Navy and the Royal Air

* Despatch of the Commander-in-Chief, British Armies in France.

Force and the responsibilities of each Service in respect of the protection of Great Britain and of her communications by sea was investigated by a sub-committee of the Committee of Imperial Defence which was set up in 1923; the report of this sub-committee is given as an appendix to this chapter.

Air co-operation with naval forces is both strategical and tactical, particularly in reconnaissance and in the facilitating and expediting of communications between the commander and subordinates.

Attacks by aircraft against a hostile fleet sheltering in harbour may be able to force an action at a moment unpropitious to the enemy. Attacks against dockyards and arsenals may also achieve considerable success, especially immediately following a naval action when all such resources are taxed to the limit. Attacks against merchant shipping when in port may also materially assist a submarine campaign, and may be a decisive factor in the employment of this weapon against the economic life of an enemy. The value of aircraft in direct attacks against fighting ships was not clearly demonstrated during the last war, but the balance of cost between attacker and attacked is heavily on the side of aircraft. Co-operation between naval units and aircraft presents extremely difficult and complex technical problems. Naval personnel, initially trained by the Royal Air Force, compose the Fleet Air Arm which is distributed among the six aircraft carriers. Twenty-four flights, equivalent to twelve squadrons, have been allocated to naval co-operation exclusive of the units of the Royal Australian Air Force serving on H.M. Air-carrier *Albatross* with the Royal Australian Navy.

War, as defined by Clausewitz, is a continuation of policy, and is thus only an intermediate stage between peace and its renewal, and the shorter and the less expensive it is the better, since the experience of the last war goes definitely to show that the difference between winning and losing a national war is only one of degree, and that the dislocation of the normal peace-time activities of nations drastically affects even the victorious states. It is, therefore, of paramount importance that that kind of pressure most suited to a particular arm should be brought to bear upon an enemy state not separately but in conjunction with other forms of pressure by other Services, each acting as complementary to the other and all accurately co-ordinated with such other pressure, diplomatic, financial or moral that other civilian agencies of the state can also bring to bear. Only then can the full driving power of the modern state be brought to the support of the national policy.

APPENDIX A.

PART II.—CO-OPERATION AND CORRELATION BETWEEN
THE THREE SERVICES FROM THE POINT OF VIEW
OF NATIONAL AND IMPERIAL DEFENCE.

3. At the outset of the enquiry the Committee agreed that the term "National and Imperial Defence" could properly be defined as "Defence of Territory and Defence of Communications." In order to establish the principles of co-operation and correlation between the three Services from the point of view of National and Imperial Defence, it was found necessary to make a careful examination of the responsibilities of the three Services in this matter.

PRE-WAR RESPONSIBILITIES OF THE FIGHTING SERVICES.

4. The main responsibilities of the Navy, as they were regarded before the war, were set forth in a Memorandum by the Committee of Imperial Defence on the Principles of Imperial Defence in 1910 in the following terms:—

"The maintenance of sea supremacy has been assumed as the basis of the system of Imperial Defence against attack from over the sea. This is the determining factor in shaping the whole defensive policy of the Empire, and is fully recognized by the Admiralty, who have accepted the responsibility of protecting all British territory abroad against organized invasion from the sea."

5. The Army was responsible for dealing not with organized invasion from the sea, which was a purely naval responsibility, but with such raiding forces as might elude the Fleet. This responsibility included the general military defence of the United Kingdom, as well as the provision of fixed defences and garrisons at Naval bases, Imperial coaling stations and defended ports at home and abroad (other than those in the Dominions and India). The Army was also responsible for the provision of reinforcements for India in certain eventualities, for the defence of certain land frontiers, and for the maintenance of an expeditionary force to meet the military needs of the Empire, wherever they might arise. This expeditionary force formed the nucleus on which were built up the huge armies employed in the Great War.

6. The Royal Air Force before the war was regarded as purely ancillary to the older Services, of which it formed a part. It

emerged from the Great War as a separate Service under a separate Ministry. It is essential, therefore, to the co-ordination of Imperial Defence that the responsibilities of the new Service should be very clearly defined and correlated with those of the sister Services.

THE POST-WAR RESPONSIBILITIES OF THE FIGHTING SERVICES.

7. Considerable progress had been made before the commencement of the present enquiry in the direction of defining the post-war responsibilities of the three fighting Services. The enquiry by Mr. Bonar Law's Sub-Committee on the Capital Ship (March, 1921), which heard much evidence as to the potentialities of the air arm at sea, had resulted in the retention of the capital ship as the basis of our sea power. The scope of the enquiry, however, did not extend to a definition of the respective responsibilities of the Navy and Air Force in regard to operations at sea.

8. The Committee of Imperial Defence had also approved an arrangement made between the War Office and Air Ministry in regard to the responsibility for anti-aircraft defence, under which the Air Force was to be responsible for the control of anti-aircraft defences, the War Office providing the necessary personnel and matériel on the ground.

9. Since the war, the Royal Air Force has been given the responsibility for the security of the mandated territory of 'Iraq and Palestine.

10. In addition, on the 16th March, 1922, the following principles in regard to the co-operation of the three Services were announced in the House of Commons:—

- “(i) That the Air Force must be autonomous in matters of administration and education;
- “(ii) That in case of defence against air raids, the Army and Navy must play a secondary rôle;
- “(iii) That in the case of military operations by land or naval operations by sea, the Air Force should be in strict subordination to the General or Admiral in supreme command; and lastly,
- “(iv) That in other cases (such as the protection of commerce and attack on enemy harbours and inland towns) the relations between the Air Force and the other Services should be regarded rather as a matter of co-operation than that of the strict subordination which is necessary when aeroplanes are acting merely as auxiliaries to the other arms.” (Parliamentary Debates, March 16th, 1922.)

11. In order to ascertain whether the above allocation of responsibilities between the three Services required further readjustment, the Committee felt it necessary to make investigations into the strategical basis of our system of National and Imperial Defence.

12. The most important result of this part of the enquiry was to confirm the vital need for a great increase in our air forces, which had been established in previous enquiries. It soon became clear, not only that the Air Force has an important part to play in the defence of our home territory against sea-borne attack as well as of maritime communications in waters adjacent to the British Islands, but that to provide protection against aerial attack a large aerial Home Defence Force was required. The question of the size of this force formed the subject of an interim report to the Cabinet, and is dealt with in Part VI of this report. The adoption by the Government of the Committee's recommendations on this subject added to the responsibilities of the Royal Air Force. In other respects, however, it did not bear upon the problem of co-operation and correlation between the three Services, which depends on those aspects of National and Imperial Defence where strategical or tactical co-operation between two or more Services is required. The Committee therefore enquired into these questions in considerable detail.

13. So far as the protection of territory and communications in the wider oceans is concerned, the question of a readjustment of responsibilities between the Service Departments did not arise. Although certain types of aeroplanes have a radius of action up to 500-600 miles, and others up to 300-400 miles, neither the British nor any other Air Service is yet equipped with aeroplanes whose normal effective radius of action exceeds about 200 miles, and beyond that distance only sea-borne aircraft have for the present to be considered. But it must be remembered that the types of aeroplanes now in service use continue steadily to be replaced by machines of greater power and wider radius of action. Whatever the arrangements for the organization and administration of the sea-borne air arm may be—a subject dealt with in Part IV—there is no dispute that its operations must be controlled and directed by the same authority that controls and directs the other operations of the Fleet, namely, the Admiralty. The responsibility of the Admiralty, therefore, for the protection of territory and communications in great oceans was not challenged.

14. In the narrow seas, however, Imperial territory and communications are evidently liable to attack, not only by surface craft and submarines, but also by aircraft, in so far as they are within the radius of action of aircraft operating from foreign

territory. The Committee therefore found it necessary to enquire how far the power of the Navy to protect territory and communications in the narrow seas is affected by modern developments of naval and aerial warfare.

15. So far as territory is concerned, it is satisfactory to be able to record that the three General Staffs are agreed that in existing conditions the liability of the United Kingdom to sea-borne invasion as compared with the years preceding the war is negligible.

16. Another matter on which some measure of agreement was found to exist between the Naval Staff and the Air Staff is in regard to the increased risks to communications in those portions of the narrow seas which are exposed to attack by aircraft operating from shore bases, such as the English Channel and the Mediterranean. Both Staffs admit that the advent of aircraft has increased the danger to communications in such waters, though they differ as to the extent of this danger.

17. Apart from this, when the Committee came to examine the question of the protection of maritime communications in the narrow seas, they did not find the same measure of agreement between the Staffs which they had met with in regard to the protection of the territory of the Mother Country. On the contrary, this part of the enquiry revealed wide differences of professional opinion between the Naval Staff and the Air Staff, both in matters of principle and detail, on such questions as the power of a fleet to operate within effective striking range of hostile aircraft, the effectiveness of attacks on a fleet by aircraft and the power of a fleet to defend itself against such attacks, the defence of naval bases against aircraft attack and the protection of certain portions of our trade routes. The more closely the enquiry was pressed in matters of detail the wider these differences appeared.

In the course of this enquiry frequent appeals were made to the experience of the war in support of both sides of the various controversies, and the Committee obtained independent historical evidence from the Historical Section. The conditions of the late war, however, are not necessarily applicable to future wars, particularly in view of the potentialities of development in aircraft.

In the light of present knowledge the Committee did not feel competent to form an opinion on the difficult technical questions on which the General Staffs take different views. They felt that, apart from the provision of an adequate Air Defence Force, which is dealt with in Part VI of this Report, the most useful service they could render at the moment was to devise machinery for securing the smooth co-operation of the three Services, notwithstanding the differences of professional opinion, and for gradually

building up a doctrine common to the three Services. This part of the terms of reference is dealt with in Part III of this Report. While the Committee do not put forward any suggestion to change the existing division of responsibility between the three Services as described in paragraph 10, they recommend that the responsibilities of the Navy and the Air Force in regard to the protection of communications in the narrow seas should form the subject of further investigation. They also consider that experiment in respect of the problems of air attack and defence at sea should be given due weight in Admiralty and Air Ministry programmes, in order to secure on the basis of practical experience the fullest measure of unity of professional opinion. (C.M.D. 2029, 1924.)

PART V.—THE RELATIONS OF THE ARMY AND THE AIR FORCE.

41. The question of the relations of the Army and the Air Force formed the subject of an Interim Report by the Chairman to the Cabinet, dated the 30th June, 1923, the effective portions of which are contained in the following extracts:—

“The Secretary of State for War recently circulated to the Sub-Committee a Memorandum by the General Staff on this question. . . .

“The views of the General Staff are contained in Part I of that Memorandum, and are summarized on p. 4 in the following terms:—

“(a) The air units, which are an integral part of the Fleet and Air formations (including probably lighter-than-air formations) capable of co-operating with the Fleet on the high seas, to be under the Admiralty.

“(b) The air units, which are an integral part of Army formations and Air formations required to co-operate with the Army (including Air Forces allotted to the general pool for war and to home defence), to be under the War Office.

“(c) Civil aviation, research, experiment and supply to be under the Air Ministry, which, relieved of all responsibility for the employment of Air Forces in peace and war, could be much reduced.

“Each of the three Departments (Naval, Military and Civil) would estimate for its own air requirements, the whole being co-ordinated by the Committee of Imperial Defence before presentation to Parliament.”

“ The view of the Sub-Committee was to the effect that the above distribution of responsibility was unsatisfactory, and that if the Air Forces of this country were to be developed to the utmost it was necessary to retain the Royal Air Force as a separate Service, and that progress would not be so great if the War Office proposals were adopted. The conclusion of the Sub-Committee was:—

“ ‘ That they were unable to accept the views expressed by the General Staff in Part I of their Paper.’ ”

The Secretary of State for War, while strongly supporting the General Staff solution, expressed the readiness of the War Office to co-operate in furthering the scheme as accepted.

The Cabinet adopted the above Report on the 9th July and confirmed the present arrangement under which the Royal Air Force is administered by the Air Ministry as a separate Department of State. (C.M.D. 2029, 1924.)

APPENDIX B.

RECOMMENDATIONS OF THE NATIONAL AND IMPERIAL DEFENCE COMMITTEE UPON THE RELATIONS OF THE NAVY AND THE AIR FORCE AND THE CO-ORDINATION OF THE DEFENCE FORCES.

I.—THE RELATIONS OF THE NAVY AND THE AIR FORCE.

The Main Committee observe that the Special Sub-Committee are not altogether satisfied with the term "Seconded" which they have used in describing the status of Naval officers serving in the Fleet Air Arm. It is clear that the actual position of a Naval officer seconded to the Air Service afloat differs from a seconded officer as hitherto understood. For example, he continues to be under the ultimate tactical and disciplinary orders at sea of an officer of the Service to which he permanently belongs, whilst he is serving under the immediate command of an officer of the Service to which he is temporarily attached. Moreover, the work he is called on to do in his temporary Service directly relates to the needs of his parent Service, and he carries it out under the eyes of a commanding officer of his parent Service. The Main Committee therefore consider the term "Seconded" not altogether appropriate. They would prefer the more general term "Attached," provided the conditions of attachment necessary in this particular case are clearly understood, as follows: These Naval officers belonging to the Fleet Air Arm are therefore to be attached to the Air Service. But whilst after their training under the Air Service they will be posted to units of the Navy by the Air Service on the nomination of the Admiralty and will serve under the immediate command of Air Service officers, yet afloat they will be under the ultimate command of the Naval officers of the Fleet. Though their temporary pay and their acting rank will be determined by the Air Service, after consultation with the Admiralty, yet their permanent rank and promotion will continue to be subject to the regulations of the Navy. Lastly, though they must serve with the Air Service and not be moved from it during the period of their attachment without the consent of the Air Ministry, yet as regards discipline and status afloat they will in all respects be in precisely the same position as officers of the Royal Marines.

With regard to uniform, the officers and men generally of the Fleet Air Arm will wear a distinguishing badge on their uniform. If the Admiralty desire, the Naval officers attached to the Fleet Air Arm will retain their Naval uniform with the same badge.

If any Naval other ranks and ratings are employed in the Fleet Air Arm, the same principle as regards uniform and badges would apply.

REPORT OF THE SPECIAL SUB-COMMITTEE.

PART I.—THE GENERAL PROBLEM.

1. Your Sub-Committee were instructed to enquire into the relations of the Navy and the Air Force as regards the control of Fleet air work, and on this point they have taken a great deal of evidence from witnesses representing both Departments.

In addition to this, two of our members, Lord Peel and Lord Weir, accompanied by Sir Maurice Hankey (Secretary), paid a visit to the aerodromes in the neighbourhood of Portsmouth and the aircraft carriers *Argus* and *Eagle*.

2. In the course of the somewhat acute controversy between the two Departments, a very large number of points have been raised whose importance is subsidiary and illustrative. This was inevitable, and probably desirable; but the broad principles lying at the root of the policies respectively advocated by the contending parties are perfectly intelligible, quite apart from the detailed arguments and counter-arguments by which they are supported.

3. To the Air Ministry was given in 1917 control over the air forces of the country. The Department was at one stroke placed on a par with the Admiralty and the War Office, for, though aerial warfare is a growth of yesterday, it was felt that its rapidly increasing importance required an organization which would ensure its development under the most favourable conditions. In these circumstances it was only natural that the Air Ministry should strongly object to being partially dismembered so soon after it had been brought into existence, the more so as in the early days of this dispute the severance of the Fleet Air Arm from the rest of the Air Force meant an immensely larger proportionate loss than it would mean at the present moment. But though the injury involved in the complete removal from their jurisdiction of the Fleet Air Arm is relatively diminished, it remains in principle the same, and if carried out to its logical conclusions would, in the opinion of the Department, lead to many administrative difficulties and much overlapping, while in the region of supply and research it would hamper progress and increase expense.

4. The Admiralty case is not less worthy of most serious consideration. In their view a Fleet Air Arm is now as necessary to a Fleet as cruisers, destroyers or submarines. Aerial reconnaissance and aerial "spotting" are as strictly Naval operations

as gunnery, torpedo work and wireless-telegraphy. It seems to them intolerable that, while they are responsible for the safety and success of our Battle Fleets, the air work on which that safety and that success in large measure depend should be performed by persons belonging to another Service, imbued by different traditions, and looking for support and promotion to a different Department.

5. Your Sub-Committee have the greatest sympathy with both these points of view, and they have given much anxious thought to the question of how they can best be dealt with. They do not think that the present system can remain altogether unchanged; neither do they think it possible to sever completely the Air organization which does work for the Fleet from the Air organization which is responsible for Home Defence against air attack and for co-operating with the Army in other theatres of operation. A course somewhere between these two extremes is the one we recommend, but before describing our suggestions in detail it seems desirable to give a brief sketch of the system now in course of development along the line where the two Services come into contact.

PART II.—THE PRESENT SYSTEM.

THE GENERAL SYSTEM.

6. The general system is that the Air Ministry raises, trains and maintains the Fleet Air Arm. At sea the Fleet Air Arm comes under the operational and disciplinary control of the Admiralty, which designs, builds and maintains the carriers.

The functions of the Fleet Air Arm comprise aerial reconnaissance, Naval gunnery spotting, bombing and fighting.

The Fleet Air Arm operates at sea from a carrier, which is a floating aerodrome. In addition, in time of war, capital ships and cruisers will embark aeroplanes, but at present the risk to personnel and matériel is too great to justify this in time of peace.

Air Force squadrons also operate over sea from shore bases in co-operation with the Navy, but these are not at present in question.

The numbers of the Royal Air Force personnel at present employed with the Fleet Air Arm are 115 officers and 681 other ranks.

POLICY.

7. Naval Air policy is concerted by the Air Staff and Admiralty War Staff. Initiative may come from either side, but Naval officers of high rank do not, under the present system, have many opportunities of obtaining experience or training in air matters to fit them for this work.

THE COASTAL AREA.

8. Apart from matters of policy, liaison is secured between the Navy and the Air Force by a special machinery termed the "Coastal Area" Organization. This is provided by the Air Ministry for the purpose of administering the Fleet Air Arm on land, subject to the general control of the Air Ministry. The Coastal Area is commanded by a senior Air Force officer (the present occupant is an ex-Naval officer) who is responsible for the maintenance at full strength of the personnel and matériel of the Fleet Air Arm, and for its special training for Naval purposes. He is the adviser to the Admiralty on Air matters other than policy, and communicates directly with the Commander-in-Chief, Atlantic Fleet, on all matters connected with the Fleet's requirements.

9. Under the Air Officer Commanding the Coastal Area are two Group Captains, with headquarters at Leuchars (the Forth) and Lee-on-Solent respectively. In the case of larger operations involving the embarkation of aircraft or the carrying out of operations from shore bases, the Naval Commander-in-Chief notifies his requirements direct to the Air Officer Commanding Coastal Area. For minor operations he deals directly with one or other of the Group Captains.

10. Corresponding arrangements are made at Malta for the Mediterranean Fleet.

POSITION ON BOARD CARRIERS.

11. As soon as the Air Units are on board the carriers they come under the orders of the Naval Commander-in-Chief, and are altogether outside the control of the Coastal Area Organization, which is then, as we have already noted, only responsible for keeping units up to strength in Air personnel and matériel. The orders for flying are given by the Naval Commander-in-Chief (who has an Air Force officer on his Staff) to the Captain of the Aircraft Carrier, who is, of course, a Naval officer, and he gives his orders to the senior Air Force officer on board. The Royal Air Force personnel are responsible for the cleanliness and maintenance of their own quarters and some other parts of the ship, such as the aeroplane deck. They can be employed on the general duties of the ship. Difficulties have, however, been made in regard to the performance of particular duties, such as the training and use of Air Force personnel for passing ammunition to the guns.

12. A certain amount of co-operation is practised between the skilled mechanics of both Services. The Royal Air Force may,

for example, utilize the services of the ship's blacksmith for certain repairs to aeroplane engines, and the Royal Air Force may undertake repairs to motor-boat engines. Such co-operation is naturally limited by the highly specialized training which is inevitable in each Service.

SUPPLY OF PERSONNEL.

13. The Air Ministry are responsible for the supply of officers and other ranks for duty with the Fleet Air Arm, with the exception of certain Naval officers, who, after training in Air Force establishments, are employed as observers in "spotting" machines and some Naval ratings employed as wireless telegraph operators.

14. It is of importance to note that the Royal Air Force possesses a number of officers who were formerly in the Royal Naval Air Service, many of whom were trained as Naval officers. The senior positions in the Fleet Air Arm are at present largely filled by these officers. The original intention of the Air Ministry was that, in order to replace these, some 30 per cent. of the officers of the Fleet Air Arm should consist of Naval officers seconded for a term of years. Unfortunately, however, only a very few Naval officers responded to the invitation to volunteer for this service.

15. It may be worth noting that the general system for the supply of Air Force officers to meet future demands is divided into two classes—

- (a) Officers holding permanent commissions, and
- (b) Officers holding short-service commissions.

16. Officers holding permanent commissions, on leaving Cranwell, are given the choice of the particular branch in which they wish to specialize. Those selecting the Naval side will, in the first instance, do four years with the Fleet Air Arm. They may then serve with other branches, including courses of instruction, for a term of years in order to gain wider experience, but will ultimately return to the Naval side again. This practice will ensure that there will always be a proportion of senior officers in the Royal Air Force with Naval experience obtained in the Fleet Air Arm.

17. A proportion of the officers holding short-service commissions for five years, after receiving their initial training of one year, are posted for duty with the Fleet Air Arm, and do the whole of their service with that branch. On completion of their five years' service they are posted to the Reserve for five years, when they are earmarked as reserves for the Fleet Air Arm in case of emergency.

18. The Air Ministry endeavour to retain the personnel with the Fleet Air Units for the normal term of service (*i.e.*, four years), but exceptional cases arise when it is impossible to allow them to remain for the whole of that period.

TRAINING.

19. The whole of the primary training of flying personnel, whether their future work is to be on sea or on land, is carried out by the Air Ministry. No criticisms of it have been brought to our notice, and we do not propose to refer to it again. The later and more specialized training of the Fleet Air Arm is partly conducted in the carriers and partly on land at technical schools maintained by the Air Ministry at certain Naval ports. Apart from their initial training, before they are embarked, the Air Detachments of Carriers use their establishments for training, when not required by the Naval Commander-in-Chief for exercise. It will be seen, therefore, that as things are at present these establishments are used entirely for the purposes of the Fleet Air Arm or for shore-based aircraft co-operating with the Navy. The Air Force training schools in the Portsmouth area work in close touch with the Naval gunnery and torpedo schools. Behind the establishments devoted exclusively to training for the Fleet Air Arm are a series of technical centres maintained for the Air Force as a whole, the resources of which are available for the Fleet Air Arm.

DESIGN AND RESEARCH WORK.

20. New design, experimental and research work to meet Naval requirements are carried out by the Air Ministry after consultation with the Admiralty. The Admiralty, after consultation between the two Departments, put forward their suggestions as to the types of machines which they require, and the Air Ministry design such machines, as far as is practicable from the point of view of aerodynamics and similar technical consideration. The Air Ministry draw up the specification of the type required, and call for designs from the trade, and the Admiralty are kept fully informed of the progress made during the whole process and after the trials have been carried out.

21. The Navy are not directly represented on the design, experimental or research branches at the Air Ministry, but the Air Ministry utilize the services of a certain number of ex-Naval officers, who have now transferred to the Air Force, in these departments, and also receive reports as to defects in design and performance of machines from Air Force officers serving with Fleet Air Units, thus ensuring that due weight is attached to the user's point of view in the modification and improvement of design.

22. There is also in existence an Inter-Departmental Committee called "The Joint Technical Committee on Aviation Arrangements in His Majesty's Ships," which consists of representatives of the Admiralty and the Air Ministry. Its functions are to examine the technical problems which may arise with regard to the suitability of the types of aircraft intended for embarkation on board carriers, and the modifications and improvements which can be effected on board the carriers themselves. It is clear from the evidence that new uses of aircraft involving possibly new types can be proposed either by the Admiralty or the Air Ministry, and that the latter give full consideration to all suggestions which may be put forward by the Navy.

THE SUPPLY OF MATÉRIEL.

23. At present the Air Ministry are solely responsible for the supply of all matériel connected with aircraft. An establishment of the machines required for the Fleet Air Arm has been agreed upon between the Admiralty and the Air Ministry, and the latter is responsible for maintaining that establishment at full strength with its correct proportion of machines in reserve, the necessary spare parts and the various shore organizations required for its maintenance. This establishment is at present limited by the number of Aircraft Carriers in commission in the Navy, but the Air Ministry have made the necessary arrangements in their programme of construction to increase the number of machines up to the number which will be required when the two new Aircraft Carriers are completed in 1923-24.

PART III.—RECOMMENDATIONS.

24. We have endeavoured to explain, in the first place, the general nature of the objection felt by the Air Department to any important change in the existing system and by the Admiralty to its maintenance. We have also given a full account of the system as it has been developed up to the present moment. We now propose to turn to the future and make certain suggestions which, as we hope, may go far to reconcile the contending parties and to make material improvements in the existing system.

25. Our task is materially lightened by the fact that, in the course of discussions before your Sub-Committee, a larger measure of agreement was found possible on certain aspects of the problem than had at one time seemed likely.

26. In the first place, it appeared that on some important points the practice, though not the written law, of the Air Department was already in conformity with the wishes of the Admiralty.

For example, the Admiralty are very desirous that the Group Captains in contact with the Navy should be officers with experience of the Fleet Air Arm.

Broadly speaking, the Air Ministry take the same view, and we recommend that it be made part of the settled practice of the Air Ministry to consult with the Admiralty before such appointments are made. We think the same principle should be extended to the Air Officer Commanding the Coast Defence Area and the senior Air officer on board a carrier.

27. The Admiralty desire that the Air Ministry shall provide all the matériel which they demand. This, we believe, has always been the intention of the Air Ministry.

We think it should be formally laid down, and that, in the event of the Air Ministry for one reason or another not carrying into effect the wishes of the Admiralty, there shall be an appeal by either party to the Committee of Imperial Defence.

28. We have no reason to believe that there is any fundamental difference of opinion between the two Services with regard to certain questions of discipline, such, for example, as those which might arise when a member of the Air Force leaves the ship, where he is under the command, for every purpose, of the Captain, and goes for training to the aerodrome, which is under the control of an officer of the Air Force.

But though there are no differences of principle, there are certain obscurities which it would be desirable to clear up, and we therefore recommend that the two Departments should, in collaboration, draw up a code of regulations which would make clear the relations between them at all points where they come in contact.

29. In all the cases that we have so far enumerated there may have been misunderstanding, but there has not been at any time, so far as we are aware, any difference of principle.

30. We now turn to a class of cases where, as a result of discussion before your Sub-Committee, the Air Department have shown a disposition to meet Admiralty views. The first of these relates to the framing of the Naval Estimates. The Admiralty desire that in these Estimates should be included the cost of the Fleet Air Arm.

The Air Department are of opinion that technically this course would be inconvenient, but have no objection to it in principle. Your Sub-Committee, are of opinion that this question should be settled by the Treasury in consultation with the two Fighting Services.

31. The Admiralty require that the Air Force on board ship should be completely under the orders of its Captain. Your Sub-Committee are of opinion that, inasmuch as all the airmen on board ship are under the Naval Discipline Act, this, in theory, is already provided for, but undoubtedly in the minds of those chiefly concerned some obscurity hangs over the subject. This, we think, should be explicitly cleared up.

The position of a member of the Air Force when on board ship does not differ in law, and should not differ in practice, from the position of, say, a Marine.

32. In order fully to carry out the policy laid down in the preceding paragraph, we recommend, and have reason to believe that the Air Ministry will accept the principle, that all reports on officers of the Fleet Air Arm, whether confidential or otherwise, should be signed by the Captain of the ship and passed through the Naval Commander-in-Chief to the Air Officer Commanding the Coastal Area.

33. A further point which should be dealt with under this heading is one on which the Admiralty have expressed considerable anxiety and on which we have reason to believe that the Air Force are prepared to meet their wishes. The Admiralty are apprehensive lest, in time of war or other emergency, the Air Ministry might withdraw from the Navy units of the Fleet Air Arm, and use them for other purposes. In respect of this we recommend that it should be definitely laid down that the personnel, matériel and reserves of the Fleet Air Arm should not be withdrawn by the Air Ministry without either the consent of the Admiralty or a decision of the Cabinet.

34. Before concluding this class of questions we must take note of a complaint made by the Admiralty that on board the carrier there is a good deal of duplication of effort between the purely Naval Service and the Air Force.

We think this subject should be looked into by the two Departments concerned, and we do not doubt that arrangements can be made by which all overlapping can be effectively avoided.

35. We now come to the last class of questions with which we have to deal, which are at once the most difficult and the most important. We are strongly of opinion, and we have every hope that the two Services share our view, that, since in war the Services may have to co-operate, it is vital that in time of peace they should form an accurate estimate of each other's needs and capacities.

We therefore recommend:—

- (i) That Naval officers should be appointed to the Air Staff.
- (ii) That Air Force officers should be appointed to the Naval War Staff.
- (iii) That some means should be devised by which the wealth of technical knowledge at the disposal of the Admiralty should be utilized in the technical departments of the Air Ministry, preferably by reinforcement of the staff of these departments by Naval technicians.

36. These recommendations refer exclusively to the headquarters of the two Services; but it is perhaps even more important that the junior ranks of the two Services, who will in time occupy responsible positions, should have a considerable sprinkling of persons familiar with the needs and capacities of the other Service.

37. The Air Force look to a system of Naval seconding for carrying out half this policy, and we cannot believe that the Admiralty would be averse to having members of the Air Force on board the carriers. Unfortunately, seconding from the Navy to the Air Force, as at present understood, must be deemed to have been hitherto a failure, and we find it difficult to believe that, if the present system remains unchanged and unexplained, any great improvement is likely to occur. We cannot be surprised that a young officer who has just joined the Navy is reluctant to abandon, even temporarily, the department under which he expected to serve and to exchange it for one which is essentially different. The feeling is natural, and cannot be ignored.

It must, however, be pointed out that if the word "seconding" is thus used this is not what any Naval officer under the present scheme is expected to do. In ordinary practice, when we say that an officer is "seconded" to another Service we no doubt intend to express the idea that for the duties which he had to perform and for the authorities he had to obey in the Service which he has temporarily left, will be substituted new duties and new authorities. But this does not really represent the facts in the case of so-called "seconding" from the Navy into the Air Force. The duties of the seconded officer, though carried out in the air, remain, nevertheless, Naval duties, and the Captain whom he has to obey continues to be a Naval Captain.

In order to make this situation perfectly clear, we recommend that no seconded Naval officer shall be asked to perform non-Naval air duties, except with the consent of the Admiralty. We believe the Air Force are prepared to accept this principle.

38. If this recommendation be carried into effect, the most important change involved in the operation of what is (somewhat inaccurately) called "seconding" is the change from the Naval to a Flying uniform—a change which can hardly be said to touch the essence of the situation.

We suggest, however, in order to meet the sentimental, though not on that account unimportant, objection, that the uniform of a Naval flying man who, except for his period of training, is to all intents and purposes still under the Admiralty, should be distinguished from the flying men under the Air Force by some differentiating badge or mark. This would be the outward and visible sign that he still remains a member of the Service which he originally joined. It would be a clear indication that what he proposes to do is to add accomplishments in Naval flying to the other accomplishments which his brother officers are cultivating. If such a plan were found practicable, the objection felt by the Admiralty to the introduction of what they deem an alien element into the domestic life of the ship should be largely mitigated.

39. It might well be that, if this scheme succeeded, the number of officers seconded from the Navy to the Air Force would exceed the 30 per cent. of the total contemplated by the Air Service.

We see no reason why 30 per cent. should be regarded as the maximum, and we should propose to leave it to the Admiralty to determine what the proportion should be, subject to the proviso that not less than 30 per cent. of Air Force officers, whether regular or short service, should serve on board the carriers.

40. There is another point of great practical importance on which something must be said. It is agreed that the work of spotting for Naval gunnery is one which should be undertaken in all cases by Naval officers, but such investigations as we have been able to make convince us that Naval spotting and fleet reconnaissance cannot be sharply divided, and that the officer entrusted with the one may inevitably find himself called upon to perform the other also. We have been unable to discover any objection to this change, which, on the face of it, seems obviously reasonable.

We therefore recommend that fleet reconnaissance, as well as Naval spotting, should be entrusted to Naval officers seconded or otherwise.

41. If anybody will take the trouble to read the evidence given before us they will, we believe, be impressed by the number of problems for which a solution has been found by the two Departments or suggested in this Report. We earnestly trust that no merely technical difficulties will be allowed to stand in the way of a settlement which in the public interest is most urgently required.* (C.M.D. 1938, 1924.)

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